Families Forward Resource Center

# Colorado Perinatal Health

## Liberty and Justice for All

www.familiesforwardrc.org

December 2025

# Letter from our Executive Director

Dear Community,

At Families Forward Resource Center (FFRC), our mission has always been rooted in strengthening families and advancing maternal and child health across our communities. For over two decades, we have walked alongside families - listening, learning, and building programs that respond to both immediate needs and the broader conditions shaping health and well-being. As we continue this work, we are proud to share our Community Health Needs Assessment (CHNA), a resource designed to deepen our collective understanding of perinatal health in Colorado and guide meaningful action toward birthing justice. Many of the data sources within this report are being shared publicly for the first time, and we want to ensure that these data are in the minds, hands, and hearts of our community - because data is power when it is used to drive change.

This report was created to support healthcare providers, policymakers, advocates, and community-based organizations to better understand the realities shaping the perinatal period including pregnancy, birth, and postpartum care - particularly for Black birthing people and families. We envision this report being used to spark reflection, shape responsive programs, inform just policies, and align resources to where they are needed most.

As you read this report please remember that this assessment reflects more than numbers - behind each data point is a birthing person, an infant, and/or a family who are vital and valued members of our community. We honor their experiences, celebrate their strengths, and commit to using these insights to build a future where every birth is supported with dignity, care, and justice.

We stand at a critical juncture: one that will determine whether we continue advancing the progress made in maternal and child health - or risk losing hard-won ground. Now more than ever, we must sustain momentum, deepen collaboration, and ensure that our systems reflect the justice and compassion every family deserves. FFRC's commitment to this work is unwavering. We believe that every birthing person deserves safe, respectful, and high-quality care, and that achieving this requires both systemic accountability and community leadership.

We invite you to engage with this assessment, share its findings, and join us in transforming insight into impact. Together, we can move closer to a Colorado where all families thrive before, during, and after birth.

In gratitude and partnership,

Shawn Taylor
Executive Director
Families Forward Resource Center

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# Overview

Now more than ever, a continued focus on maternal and child health is essential to the well-being of our communities and the future of public health. Across the United States, maternal mortality rates have risen in recent years - an alarming trend in a nation with advanced medical resources. These deaths are overwhelmingly preventable and disproportionately affect Black, Indigenous, and rural birthing people. At the same time, infant mortality, preterm birth, and low birth-weight remain higher among families facing social and economic disadvantage. These outcomes are not inevitable; they reflect deep-rooted injustices in access to quality care, structural racism, and the social conditions that shape health long before pregnancy begins. Prioritizing maternal and child health is an investment in families, justice, and generational resilience.

The urgency is amplified by shifting healthcare landscapes, workforce shortages, and growing mental health and economic stressors that threaten the stability of families. The postpartum period, in particular, remains one of the most vulnerable and under-resourced stages of life - when birthing people are expected to recover physically, care for a newborn, and often return to work, sometimes with little or no medical or social support. Strengthening maternal and child health systems means ensuring that care is not only accessible but also respectful, culturally responsive, and continuous across the full perinatal period. When families thrive, communities thrive: healthier pregnancies lead to healthier infants, stronger families, and a more just society. Continued attention, innovation, and advocacy in this field are critical to reversing preventable tragedies and creating a future where every pregnancy is supported, and every family has the opportunity to grow and flourish.

In Colorado, advancing maternal and child health also requires a deeper understanding of our local context - the unique demographic, geographic, and systemic factors that influence health outcomes across urban, suburban, and rural communities. While state wide data reveal important trends, they often mask neighborhood-level disparities shaped by access to care, healthy food options, transportation, economic opportunity, and trust in the healthcare system. To design effective programming, allocate resources equitably, and inform responsive policy, we must invest in more precise, community-informed data collection and analysis. This localized understanding will ensure that maternal and child health efforts in Colorado are not only evidence-based but also rooted in the lived realities of families - allowing programs and policies to truly meet people where they are and drive meaningful, lasting change toward health justice.

This Community Health Needs Assessment (CHNA) was created to illuminate the local realities shaping maternal and child health - bringing rich data sources together to share a fuller story of perinatal health in our communities. This report centers Black birthing liberty and justice because Black women and birthing people continue to experience disproportionately high rates of maternal morbidity and mortality, despite our strength, resilience, and leadership within our communities. These inequities are rooted in the longstanding disinvestment in Black maternal health. Centering this lens is essential to achieving meaningful, lasting improvements in perinatal health liberty and justice for all.

We envision this assessment as a living tool for advancing perinatal health justice - guiding resource allocation and programming, shaping community-informed policy, and supporting organizations and systems in aligning their practices with the needs and strengths of those most impacted. Ultimately, the CHNA serves as both a mirror and a map: reflecting inequities that persist and charting a path toward more just, responsive, and equitable maternal and child health systems.

Each section of this report is designed to stand independently while also contributing to the larger story of maternal and child health in our community. Readers do not need to read the report in sequence; each section can be explored on its own, and we encourage navigation based on individual interest or need. While each section offers insight into data sources, analytical approaches, methodology, and limitations, detailed information is found in the report appendix.

# Geographic Black Birthing Trends

**Data Source: Colorado Department of Public Health and Environment, 2020 - 2024**

Communities across Colorado continue to evolve, and tracking where births occur provides important insight into shifting demographics and access to care. Changes in where birthing families live often reflect broader patterns of housing affordability, economic opportunity, population displacement, and perceptions of safety and support. Monitoring these trends helps identify emerging or underserved areas and ensures that perinatal services remain aligned with community needs.

From 2020 to 2024, Colorado recorded 312,370 births, including 14,679 (4.7%) to Black birthing individuals. Most Black births (10,347; 70.0%) occurred in the Metro Denver region - Adams, Arapahoe, Broomfield, Denver, Douglas, and Jefferson counties - followed by 2,547 births (17.4%) in El Paso County. The remaining 1,785 births were distributed across the state, with higher concentrations in Greeley/Fort Collins, Fort Morgan, Fountain, and Pueblo. Municipal-level residential patterns also shifted during this period, with fewer Black birthing residents living in Aurora, Denver, and Colorado Springs by 2024 compared to 2020.

During this timeframe, several communities including Aurora, Denver, Colorado Springs, Lone Tree, Fort Morgan, and Fountain experienced declines in the number of Black birthing residents, while cities such as Arvada, Castle Rock, Englewood, Littleton, Parker, Fort Collins, Loveland, Brighton, Greeley, and Grand Junction saw increases of more than 200% in Black births from 2020 to 2024. These shifts underscore the need to continually reassess the distribution of perinatal resources so that care remains accessible, responsive, and aligned with the realities of Colorado's changing communities. Please see Table 1 and Figure 1.

| | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Arvada | 7 | 14 | 9 | 14 | 15 |
| Aurora | 963 | 914 | 897 | 890 | 859 |
| Broomfield | 4 | 11 | 11 | 10 | 4 |
| Commerce City | 22 | 34 | 41 | 37 | 56 |
| Castle Rock | 5 | 17 | 10 | 11 | 10 |
| Englewood | 41 | 48 | 44 | 43 | 48 |
| Littleton | 6 | 10 | 15 | 14 | 20 |
| Lone Tree | 11 | 7 | 8 | 8 | 7 |
| Parker | 22 | 14 | 22 | 33 | 32 |
| Denver | 1,085 | 956 | 949 | 954 | 966 |
| Longmont | 4 | 5 | 4 | 5 | 8 |
| Fort Collins | 6 | 15 | 13 | 13 | 14 |
| Loveland | 0 | 5 | 0 | 5 | 9 |
| Brighton | 11 | 17 | 22 | 16 | 19 |
| Evans | 7 | 5 | 3 | 8 | 8 |
| Greeley | 66 | 58 | 55 | 49 | 72 |
| Fort Morgan | 26 | 21 | 18 | 20 | 20 |
| Sterling | 0 | 4 | 3 | 5 | 3 |
| Fountain | 47 | 33 | 33 | 34 | 41 |
| Peyton | 10 | 15 | 22 | 8 | 8 |
| Colorado Springs | 542 | 530 | 524 | 468 | 483 |
| Pueblo | 19 | 19 | 28 | 25 | 23 |
| Grand Junction | 0 | 0 | 7 | 3 | 11 |

**Table 1 - Total Number of Births to Black Birthing Individuals throughout Colorado from 2020 to 2024**

**Localized Trends**

While Denver, Aurora, and Colorado Springs experienced a net reduction in Black births between 2020 and 2024 and Arvada, Castle Rock, Englewood, Littleton, Parker, Fort Collins, Loveland, Brighton, Greeley, and Grand Junction experienced a net growth in Black births between 2020 and 2024 , ZIP code level data reveals more granular trends.

**Metro Denver**

**Denver Neighborhoods**

Black births in Denver were generally geographically distributed throughout the city, though six ZIP codes 80205 (Five Points neighborhood), 80220 (Montclair neighborhood and a portion of the East Colfax and Hilltop neighborhood), 80231 (portions of the Hampden and Hampden South neighborhoods), 80239 (Montbello), 80247 (portion of the Hampden South), and 80249 (Gateway and Green Valley Ranch neighborhoods) accounted for 58% of the total Black births in 2024. Between 2020 and 2024, the total number of Black births in each of these ZIP codes declined, except for 80249, which increased slightly from 141 annual Black births in 2020 to 168 annual Black births in 2024. The total number of births to Black residents, by ZIP code, are displayed in Table 2.

The total number of Black births in 2020 are mapped in Figure 2.

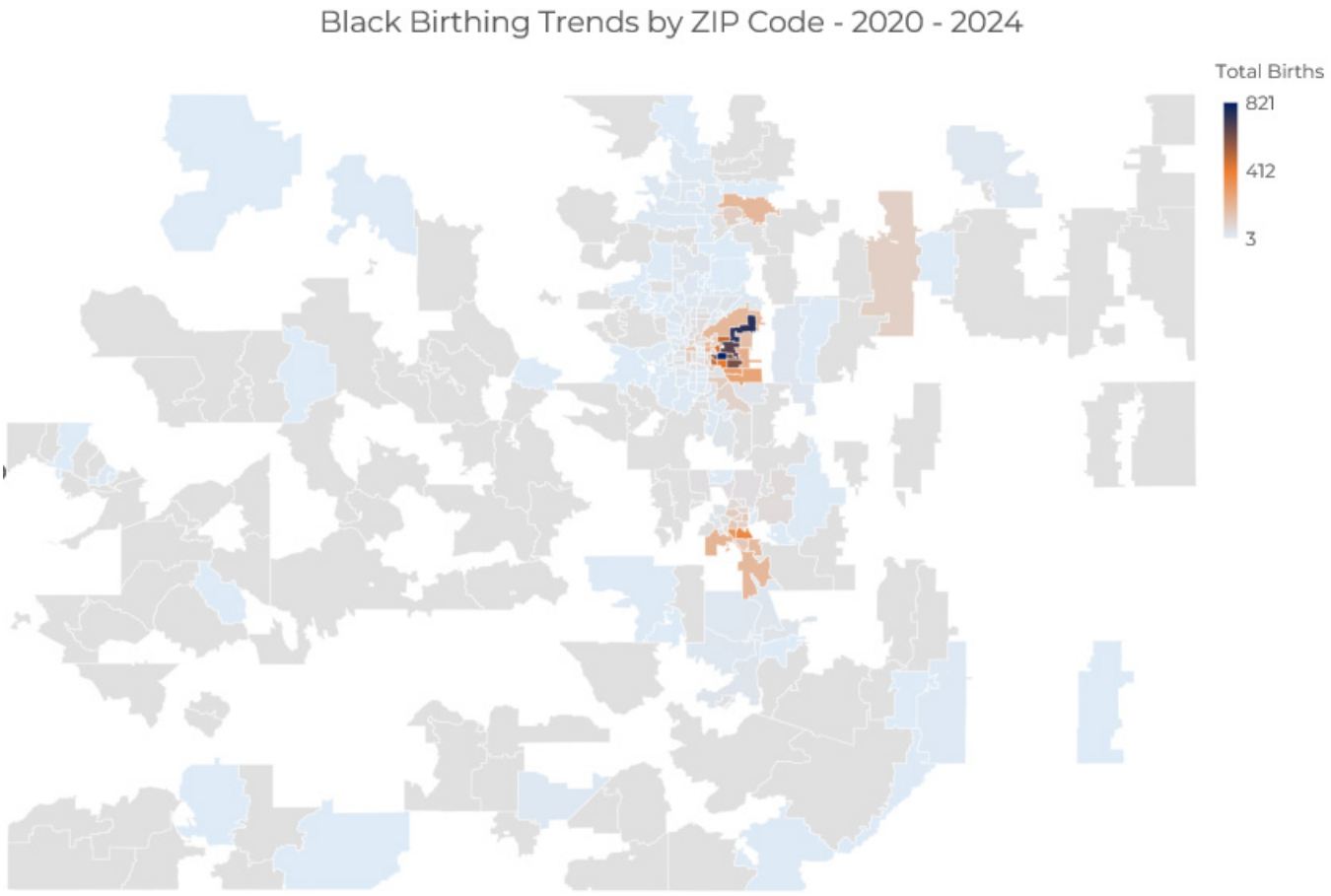



**Figure 1 - Total Births to Black Birthing People in Colorado by ZIP Code - 2020 - 2024**

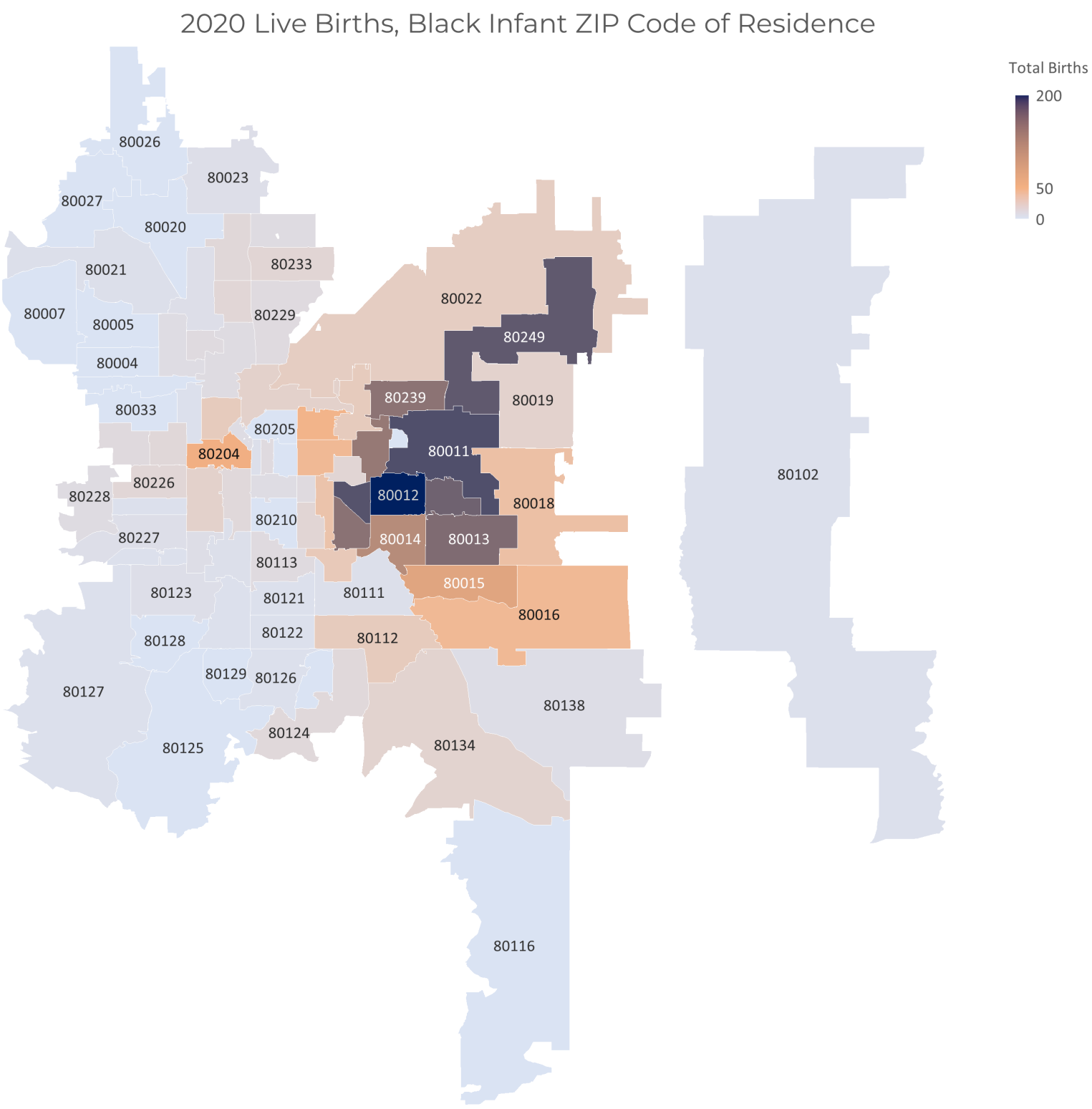



**Figure 2 - Total Births to Black Birthing People by Denver Metro ZIP Code - 2020**

| ZIP Code | 2020 | 2021 | 2022 | 2023 | 2024 | Change (2020 - 2024) | |
|---|---|---|---|---|---|---|---|
| 80201 | 0 | 0 | 0 | 0 | 0 | | |
| 80202 | 7 | 3 | 5 | 5 | 7 | 100% | |
| 80203 | 4 | 8 | 7 | 11 | 6 | 150% | ↗ |
| 80204 | 52 | 27 | 34 | 32 | 31 | 60% | ↘ |
| 80205 | 76 | 65 | 55 | 55 | 64 | 84% | ↘ |
| 80206 | 0 | 4 | 0 | 4 | 4 | | |
| 80207 | 47 | 40 | 33 | 47 | 38 | 81% | ↘ |
| 80208 | 0 | 0 | 0 | 0 | 0 | | |
| 80209 | 7 | 6 | 4 | 3 | 4 | 57% | ↘ |
| 80210 | 7 | 6 | 5 | 10 | 8 | 114% | ↗ |
| 80211 | 24 | 9 | 17 | 13 | 15 | 63% | ↘ |
| 80212 | 3 | 7 | 0 | 0 | 3 | 100% | |
| 80214 | 12 | 6 | 13 | 18 | 8 | 67% | ↘ |
| 80215 | 10 | 3 | 3 | 6 | 4 | 40% | ↘ |
| 80216 | 18 | 11 | 21 | 11 | 18 | 100% | |
| 80218 | 9 | 13 | 14 | 9 | 14 | 156% | ↗ |
| 80219 | 18 | 23 | 19 | 25 | 17 | 94% | ↘ |
| 80220 | 42 | 49 | 45 | 37 | 47 | 112% | ↗ |
| 80221 | 8 | 12 | 13 | 10 | 14 | 175% | ↗ |
| 80222 | 14 | 23 | 10 | 16 | 28 | 200% | ↗ |
| 80223 | 11 | 14 | 14 | 12 | 7 | 64% | ↘ |
| 80224 | 32 | 27 | 28 | 36 | 31 | 97% | ↘ |
| 80226 | 13 | 8 | 8 | 8 | 4 | 31% | ↘ |
| 80227 | 5 | 8 | 9 | 11 | 10 | 200% | ↗ |
| 80228 | 8 | 0 | 0 | 4 | 5 | 63% | ↘ |
| 80229 | 9 | 11 | 12 | 10 | 15 | 167% | ↗ |
| 80230 | 14 | 15 | 13 | 14 | 22 | 157% | ↗ |
| 80231 | 115 | 92 | 92 | 99 | 94 | 82% | ↘ |
| 80232 | 3 | 0 | 7 | 3 | 4 | 133% | ↗ |
| 80233 | 14 | 15 | 9 | 12 | 13 | 93% | ↘ |
| 80234 | 12 | 4 | 3 | 9 | 4 | 33% | ↘ |
| 80235 | 3 | 3 | 6 | 5 | 0 | | |
| 80236 | 6 | 9 | 7 | 7 | 5 | 83% | ↘ |
| 80237 | 26 | 19 | 26 | 21 | 25 | 96% | ↘ |
| 80238 | 24 | 32 | 19 | 28 | 21 | 88% | ↘ |
| 80239 | 114 | 100 | 84 | 97 | 88 | 77% | ↘ |
| 80240 | 0 | 0 | 0 | 0 | 0 | | |
| 80241 | 8 | 6 | 5 | 6 | 8 | 100% | |
| 80246 | 9 | 10 | 8 | 9 | 14 | 156% | ↗ |
| 80247 | 147 | 122 | 129 | 108 | 95 | 65% | ↘ |
| 80249 | 141 | 136 | 172 | 131 | 168 | 119% | ↗ |

**Table 2 - Total Births to Black Birthing People by Denver ZIP Code 2020 - 2024**

## Aurora

Black births in Aurora were geographically distributed throughout the city. Most Aurora ZIP codes demonstrated a reduction in the total number of Black births between 2020 and 2024 (80010, 80011, 80012, 80013, 80014, 80015, & 80017), while 80016, 80018, and 80019 experienced an increase in the number of annual Black births during this time. The total number of Black births by year in Aurora ZIP codes are provided in Table 3.

| ZIP Code | 2020 | 2021 | 2022 | 2023 | 2024 | Change (2020 - 2024) | |
|---|---|---|---|---|---|---|---|
| 80010 | 108 | 104 | 86 | 84 | 76 | 70% | ↘ |
| 80011 | 151 | 142 | 120 | 124 | 127 | 84% | ↘ |
| 80012 | 206 | 173 | 147 | 160 | 135 | 66% | ↘ |
| 80013 | 122 | 136 | 123 | 119 | 115 | 94% | ↘ |
| 80014 | 88 | 92 | 91 | 74 | 80 | 91% | ↘ |
| 80015 | 62 | 51 | 62 | 60 | 60 | 97% | ↘ |
| 80016 | 42 | 39 | 67 | 57 | 58 | 138% | ↗ |
| 80017 | 132 | 122 | 130 | 107 | 98 | 74% | ↘ |
| 80018 | 35 | 26 | 51 | 58 | 58 | 166% | ↗ |
| 80019 | 17 | 29 | 20 | 47 | 52 | 306% | ↗ |

**Table 3 - Total Births to Black Birthing People by Aurora ZIP Code 2020 - 2024**

## Colorado Springs

Black births in Colorado Springs were geographically distributed throughout the city. Between 2020 and 2024, all ZIP codes (80902, 80906, 80909, 80910, & 80916) that included over 30 Black births in 2020 but one (80927) experienced an annual reduction in Black births by 2024. The total number of Black births by year in Colorado Springs ZIP codes including insight into a reduction in total births by 20% from 2020 to 2024 or a 20% increase in total births by ZIP code are found in Figure 3 and Table 4.

It is worth noting that Colorado Springs is home to five military bases including Fort Carson (80913), Peterson Space Force Base (80914), Cheyenne Mountain Space Force Station (80906), Schriever Space Force Base (80912) and the US Air Force Academy. Housing associated with the US Air Force Academy includes ZIP codes 80906 and 80908. ZIP Codes 80916 and 80918 include neighborhoods in close proximity of military bases.

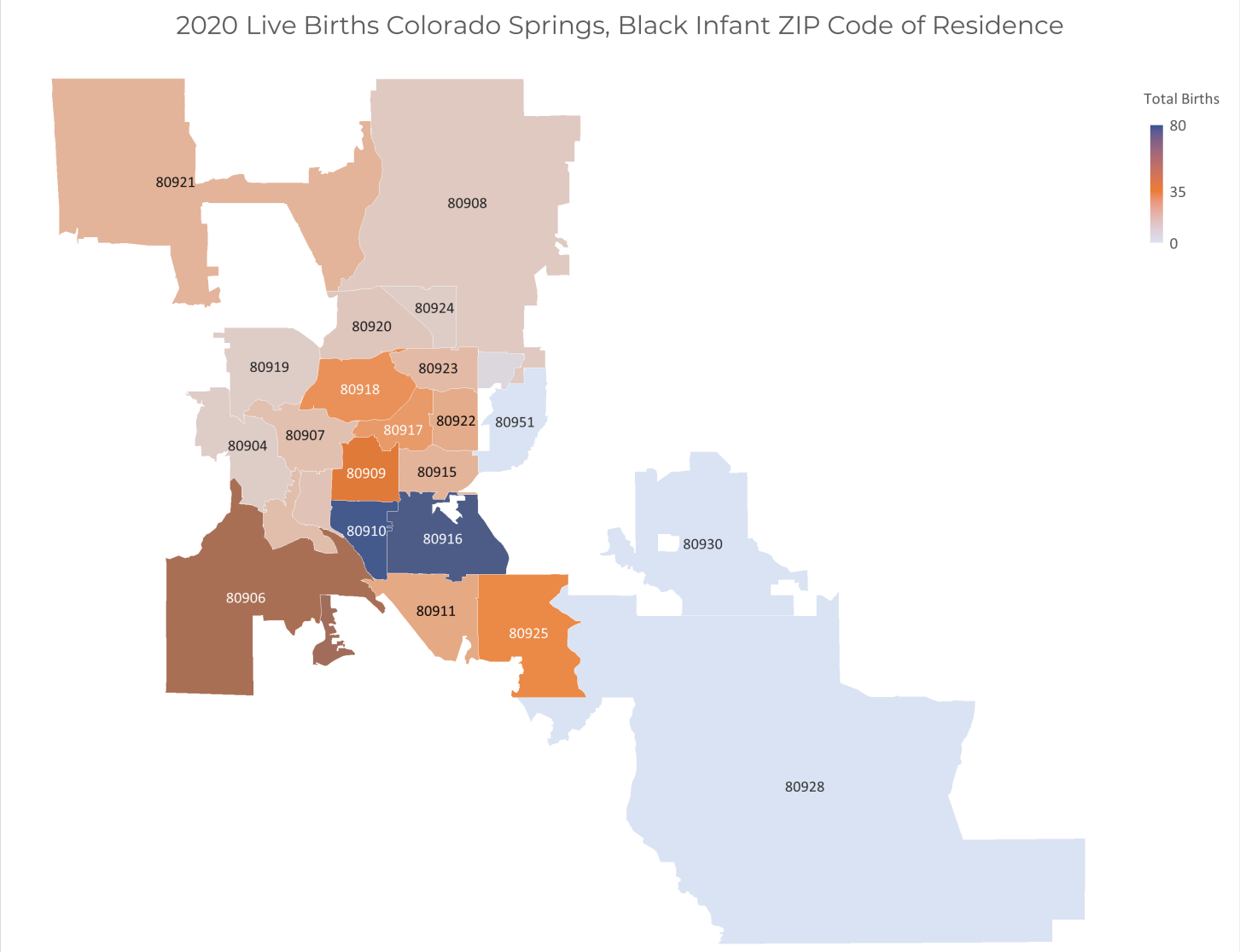



**Figure 3 - Total Births to Black Birthing People by Colorado Springs ZIP Code - 2020**

| ZIP Code | 2020 | 2021 | 2022 | 2023 | 2024 | Change (2020 - 2024) | |
|---|---|---|---|---|---|---|---|
| 80902 | 53 | 35 | 43 | 35 | 45 | 85% | ↘ |
| 80903 | 11 | 8 | 6 | 14 | 10 | 91% | ↘ |
| 80904 | 8 | 4 | 8 | 3 | 5 | 63% | ↘ |
| 80905 | 13 | 10 | 8 | 6 | 10 | 77% | ↘ |
| 80906 | 51 | 52 | 35 | 38 | 28 | 55% | ↘ |
| 80907 | 12 | 15 | 7 | 7 | 12 | 100% | |
| 80908 | 9 | 9 | 12 | 9 | 12 | 133% | ↗ |
| 80909 | 38 | 24 | 25 | 23 | 26 | 68% | ↘ |
| 80910 | 75 | 68 | 63 | 50 | 56 | 75% | ↘ |
| 80911 | 20 | 25 | 30 | 31 | 27 | 135% | ↗ |
| 80915 | 16 | 35 | 19 | 17 | 15 | 94% | ↘ |
| 80916 | 73 | 68 | 84 | 82 | 61 | 84% | ↘ |
| 80917 | 25 | 16 | 18 | 18 | 25 | 100% | |
| 80918 | 28 | 26 | 26 | 20 | 20 | 71% | ↘ |
| 80919 | 8 | 9 | 5 | 5 | 7 | 88% | ↘ |
| 80920 | 10 | 15 | 16 | 14 | 16 | 160% | ↗ |
| 80921 | 16 | 8 | 10 | 8 | 8 | 50% | ↘ |
| 80922 | 19 | 30 | 28 | 20 | 31 | 163% | ↗ |
| 80923 | 14 | 22 | 22 | 19 | 13 | 93% | ↘ |
| 80924 | 8 | 8 | 14 | 8 | 11 | 138% | ↗ |
| 80925 | 31 | 38 | 42 | 33 | 37 | 119% | ↗ |
| 80927 | 4 | 5 | 0 | 4 | 5 | 125% | ↗ |
| 80928 | 0 | 0 | 0 | 0 | 0 | | |
| 80930 | 0 | 0 | 0 | 0 | 3 | | |
| 80951 | 0 | 0 | 3 | 4 | 0 | | |

**Table 4 - Total Births to Black Birthing People by Colorado Springs ZIP Code 2020 - 2024**

## Colorado Cities & Towns with 20 or more Annual Black Births

Ten Colorado cities (excluding Denver, Aurora, and Colorado Springs) demonstrated 20 or more annual Black births between 2020 and 2024, including Commerce City, Englewood, Littleton, Parker, Brighton, Greeley, Fort Morgan, Fountain, Peyton, and Pueblo. Commerce City, Englewood, Littleton, Parker, Brighton, Greeley, and Pueblo each experienced an increase in the number of annual Black births between 2020 and 2024, while Fort Morgan, Fountain, & Peyton experienced a decrease to the number of annual Black births during this time. Please refer to Table 5.

| Location | 2020 | 2021 | 2022 | 2023 | 2024 | Change (2020 - 2024) | |
|---|---|---|---|---|---|---|---|
| Commerce City | 22 | 34 | 41 | 37 | 56 | 255% | ↗ |
| Englewood | 41 | 48 | 44 | 43 | 48 | 117% | ↗ |
| Littleton | 6 | 10 | 15 | 14 | 20 | 333% | ↗ |
| Parker | 22 | 14 | 22 | 33 | 32 | 145% | ↗ |
| Brighton | 11 | 17 | 22 | 16 | 19 | 173% | ↗ |
| Greeley | 66 | 58 | 55 | 49 | 72 | 109% | ↗ |
| Fort Morgan | 26 | 21 | 18 | 20 | 20 | 77% | ↘ |
| Fountain | 47 | 33 | 33 | 34 | 41 | 87% | ↘ |
| Peyton | 10 | 15 | 22 | 8 | 8 | 80% | ↘ |
| Pueblo | 19 | 19 | 28 | 25 | 23 | 121% | ↗ |

**Table 5 - Colorado Locations outside of Denver, Aurora, and Colorado Springs with more than 20 Births to Black Individuals in any given Year Between 2020 and 2024**

# Recommendations: Aligning Perinatal Resources With Shifting Residential Patterns

**Strengthen Localized Resource Planning Based on Population Movement**

As Black birthing families increasingly move away from historically concentrated urban centers and into surrounding suburban and regional communities, Colorado's perinatal system must pro-actively adjust. Health systems, payers, and public health agencies should use ZIP-code-level data - including areas with more than 200% growth in births - to reassess where clinics, birthing centers, Doula programs, and wraparound services are most needed. This includes developing targeted outreach and service expansion in communities such as Arvada, Castle Rock, Englewood, Littleton, Parker, Fort Collins, Loveland, Brighton, Greeley, and Grand Junction.

**Protect and Reinforce Services in Historically Anchored Communities**

While overall declines in Black births in Aurora, Denver, and Colorado Springs may appear to demonstrate a reduction in demand, these cities remain home to the largest total number of Black birthing people. Maintaining and strengthening perinatal resources in these areas - including culturally responsive providers, midwives, and Doulas - is essential to ensuring that families who remain in these communities do not experience reduced access due to shifting population patterns.

**Expand Perinatal Care Access in Emerging Growth Areas**

Cities and towns experiencing rapid increases in Black births - Commerce City, Englewood, Littleton, Parker, Brighton, Greeley, Pueblo, and others - should be prioritized for new or expanded services. This may include:

- Mobile perinatal services and community health workers
- Enhanced prenatal and postpartum home visiting
- Partnerships with local community-based organizations, clinics, FQHCs, and hospitals
- Investment in culturally responsive mental health providers in these regions
- Placement of lactation consultants and Doulas in community-based settings

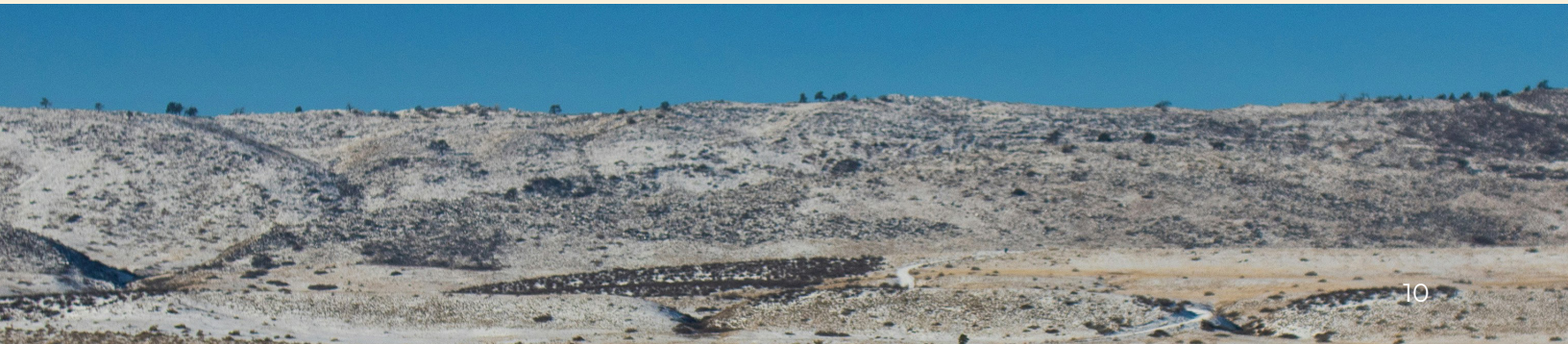
**Ensure Equitable Regional Distribution of Birthing Options**

As families relocate, more areas may lack nearby hospital-based labor and delivery units- especially given recent unit closures. Policymakers and systems should evaluate:

- Opportunities for reopening or sustaining local labor and delivery units
- Creating satellite or hospital-adjacent birthing centers
- Increasing the availability of credentialed midwives and community birth attendants
- Offering transportation supports for families in regions losing birthing facilities

**Expand Community-Based Workforce Pipelines Where Growth Is Highest**

Workforce development efforts for Doulas, midwives, lactation consultants, and perinatal mental health providers should be tailored to the ZIP codes and communities with growing Black populations. This may include tuition support, stipend-based training, paid practicum opportunities, and partnerships with local community colleges and universities to ensure a culturally diverse and place-based workforce.



# Recommendations: Aligning Perinatal Resources With Shifting Residential Patterns

**Enhance Data Systems and Surveillance for Faster Detection of Residential Shifts**
To ensure resources remain aligned with community needs, Colorado should strengthen its data systems to monitor geographic shifts in birthing populations in real time. This includes:

- Quarterly or annual ZIP-code-level updates
- Integration of Medicaid enrollment and prenatal care initiation data
- Partnerships with local organizations for qualitative insight on displacement, housing shifts, and community needs

**Collaborate With Community Organizations in Areas Undergoing Rapid Change**
Community-based organizations, housing advocates, and local public health agencies should be integrated into planning conversations. These groups often hold early insight into housing instability, migration patterns, or community displacement that may affect perinatal health long before birth data becomes available.

**Deepen Understanding of the Drivers Behind Population Shifts**
While ZIP-code–level data clearly show where Black birthing families reside over time, it does not yet explain why these changes are occurring. Additional data are needed to determine whether these shifts reflect movement from one Colorado community to another, migration of new residents into the state, or broader demographic patterns - such as changes in the population pyramid such as a reduced number of individuals of reproductive age. Understanding these underlying drivers is essential for designing responsive policies, planning perinatal services, and anticipating future needs. Strengthening data collection through linkage with housing, migration, and demographic sources will help clarify the root causes of these shifts and support more targeted, equitable decision-making.

**Link Granular Birth Trends with Maternal and Infant Health Outcomes.**
To fully understand how shifting birthing patterns relate to community health, Colorado needs more detailed, localized data on maternal morbidity and mortality. Integrating ZIP-code–level birthing trends with these outcome measures would help identify “bright spots” where communities are achieving strong results, as well as areas experiencing persistently poor outcomes. This level of insight can guide targeted interventions, inform resource allocation, and support learning from communities where equity-driven practices are showing promising impact.

# Birth Settings and Attendants

**Data Source: Colorado Department of Public Health and Environment**

Where and how a person gives birth provides important insight into birthing preferences. Birthing location, such as a hospital, birthing center, or home, can influence the medicalization of the birth, access to emergency care, monitoring, and specialized support during labor and delivery. The birth attendant - who is present to provide care, whether it's a physician, midwife, and/or doula - affects the type of support and guidance families receive, including emotional support, advocacy, and culturally responsive care. Understanding patterns in birth location and birth attendant helps communities and health systems identify trends, plan services, and ensure that families have safe, supportive, validating, and respectful care options that meet their needs and preferences.

## Where People Give Birth

Between 2014 and 2024, Colorado data show that nearly all births among both White non-Hispanic and Black non-Hispanic families occurred in hospitals, and most were attended by medical doctors (MD or DO). Yet within this overall picture, small but consistent racial differences emerge in the use of midwives, alternative attendants, and out-of-hospital settings. These differences point to broader differences in access to birthing options and models of care.

**Hospital-based births**:
Nearly all births took place in hospitals.

- White birthing people: 95–97% hospital births.
- Black birthing people: 98–99% hospital births.

**Racial differences:** White families were slightly more likely to give birth outside of hospitals (2–4%), while Black families almost exclusively delivered in hospital settings. Please see Figure 4.

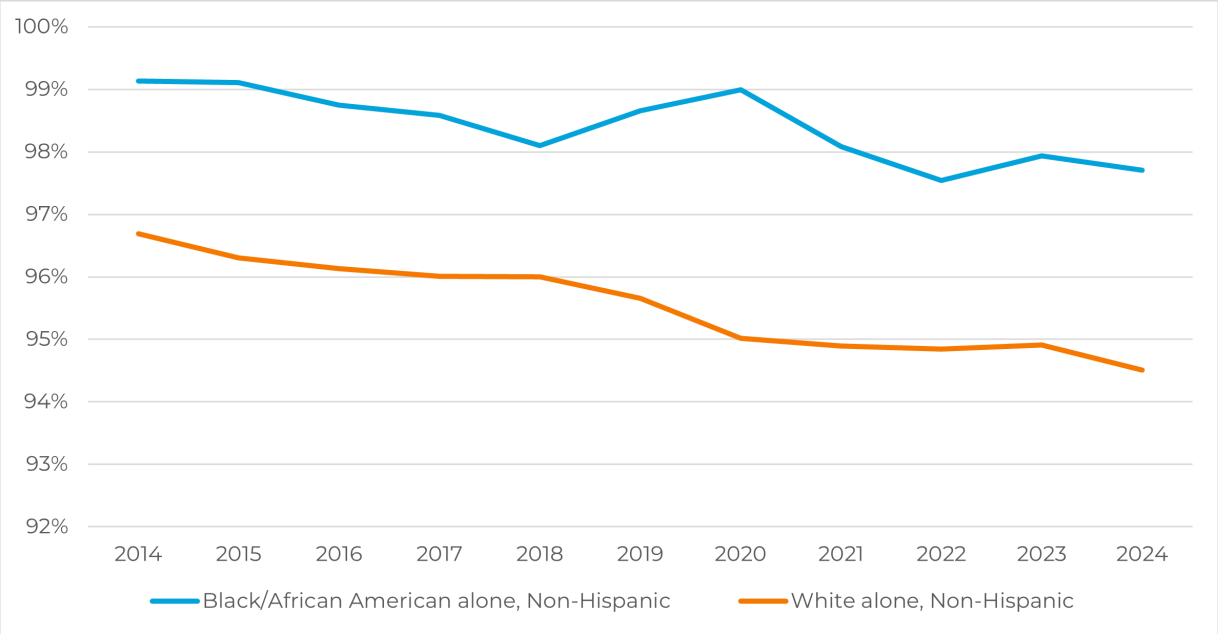



**Figure 4 - Percentage of Total Births In Hospitals Comparing Births to Black and African American Individuals to White Individuals - Colorado 2014 - 2024**

## Birth Attendants

**Medical doctors (MDs & DOs)**:

The majority of births for both groups were physician-led, though physician-led births generally trended downward between 2014 and 2024.

- White birthing people: Declined from 85% in 2014 to 80% in 2024.
- Black birthing people: Declined from 83% to 82% in the same period.

**Certified Nurse Midwives (CNMs)**:

- White birthing people: Stable at 12–15% across the decade
- Black birthing people: Higher in mid-2010s (up to 24% in 2017) but dropped to 13% by 2024.

**Registered Midwives (community-based)**:

- White birthing people: Consistent 2 – 4% of births.
- Black birthing people: Very limited access (~1% by 2020–2024).

**Other attendants**: Small increases for both groups, reaching 4% by 2024.

Please see Figures 5 and 6.

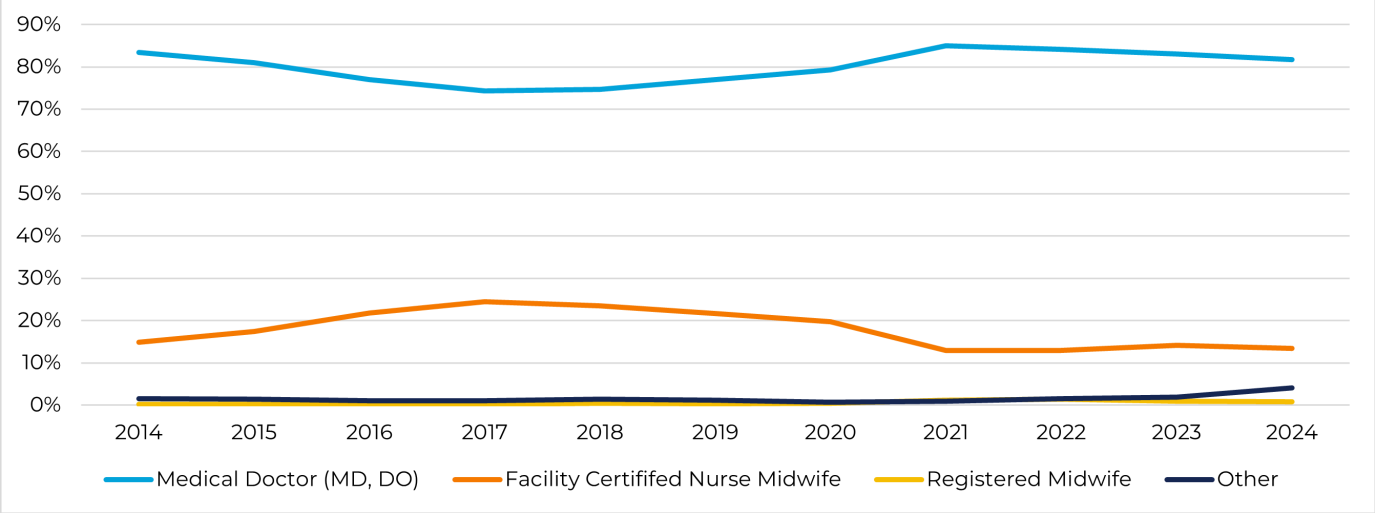



**Figure 5 - Birthing Attendant Type - Black Birthing Individuals 2014 - 2024**

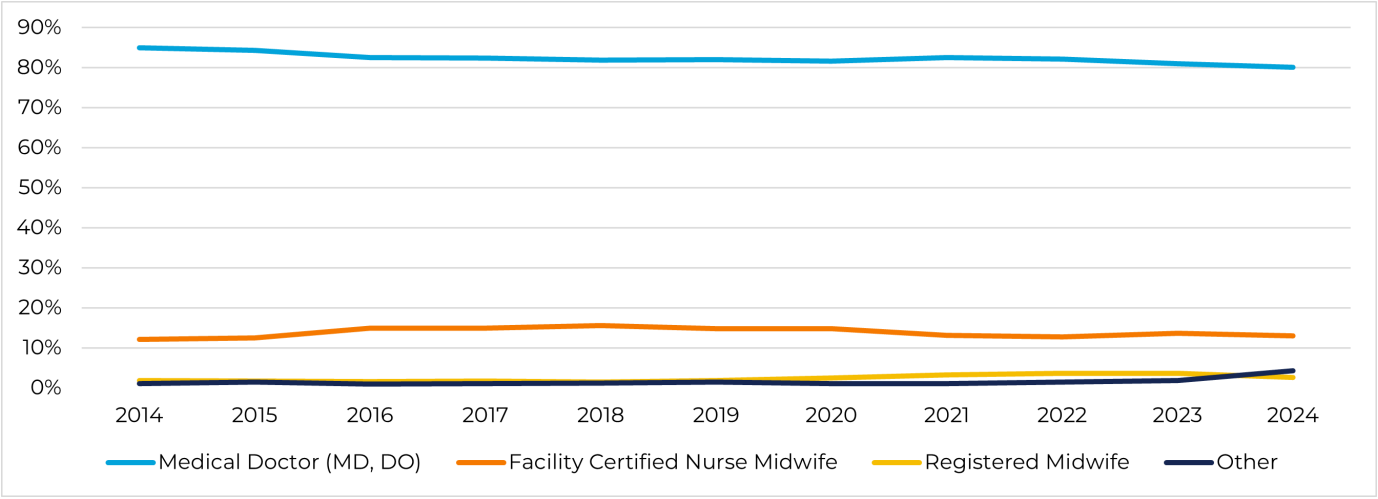



**Figure 6 - Birthing Attendant Type - White Birthing Individuals 2014 - 2024**

Patterns in birthing location and attendant type suggest that while hospital-based, physician-led care dominates across both groups, White birthing people are slightly more likely to opt for out-of-hospital births and registered midwives. Black birthing people, by contrast, almost exclusively deliver in hospitals and rely heavily on physicians, with declining use of midwives over time.

### Points for Consideration

It is important to note that the COVID pandemic occurred during the presented time period starting in 2020, and is perhaps associated with the uptick in hospital-based births during this time. It is also important to note that Colorado has experienced changes in birthing center options, including six labor and delivery units that closed between 2018 and 2025, four located in rural areas and two in urban areas. In 2023, one additional rural hospital in Southwest Colorado temporarily closed its labor and delivery unit and reopened due to community demand and outcry.[2]

### Implications for Practice

Equity in birthing options: Ensuring that all families - particularly Black birthing families - have real access to trusted, culturally concordant midwifery and community-based care.

- **Trust and advocacy:** Addressing the systemic mistrust rooted in experiences of discrimination within healthcare by integrating Doulas, midwives, and culturally responsive birth workers into care teams.

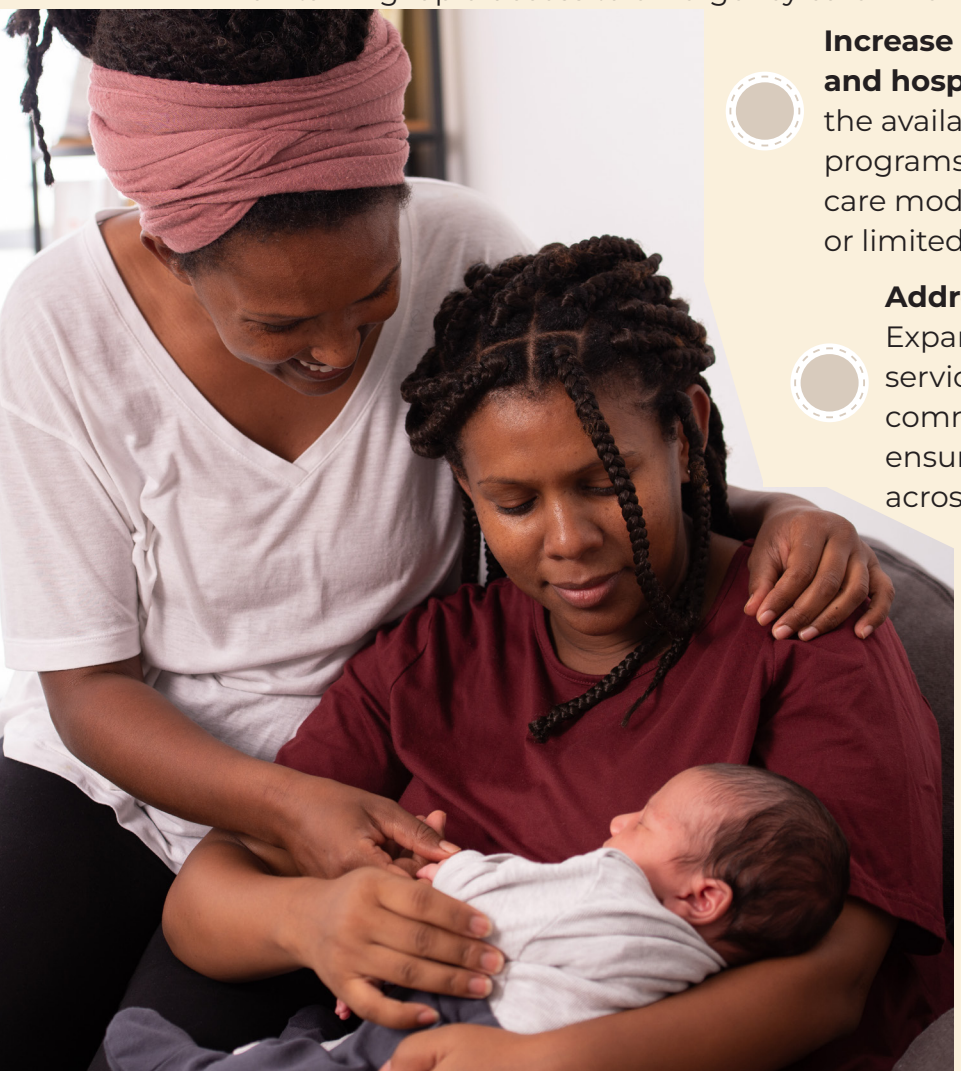
- **Systems and policy change:** Expanding insurance coverage for midwifery and out-of-hospital births, investing in Black-led birth centers, and increasing the availability of diverse maternity care providers.

[2] https://collective.coloradotrust.org/stories/in-rural-southwest-colorado-maternal-health-care-access-is-at-risk/

# Recommendations: Expanding Equitable Access to Birthing Options and Supportive Attendants

Birth location and attendant type play a critical role in maternal and infant outcomes, as well as the birthing experience itself. Colorado data from 2014–2024 show that hospital-based, physician-led care dominates across racial groups, yet small but persistent differences highlight inequities in access to midwives, community-based attendants, and alternative birth settings. Ensuring that all families - especially Black birthing people - have meaningful access to a range of safe and culturally responsive birthing options is essential to advancing perinatal equity.

- **Increase education and informed choice around birth settings:** Provide families with clear, accessible information about birthing options, including hospital, birthing center, and home births.
- **Expand culturally concordant midwifery and community-based care:** Invest in Black-led and culturally grounded birth centers, midwifery programs, and registered midwives to increase access for families currently under-represented in these care models.
- **Integrate support for self-advocacy and trust-building:** Embed Doulas, culturally responsive birth workers, and midwives into hospital and community-based care teams to enhance advocacy, respectful communication, and support for families navigating care decisions.
- **Strengthen hospital and birthing center practices:** Encourage hospitals to adopt patient-centered birthing environments, including flexible staffing models, patient choice in birth attendants, and protocols that honor family preferences while maintaining rapid access to emergency care when needed.



- **Increase awareness of community-based and hospital-adjacent options:** Promote the availability of birthing centers, midwifery programs, and integrated hospital-adjacent care models, especially in areas where closures or limited options have reduced choice.
- **Address policy and insurance barriers:** Expand insurance coverage for midwifery services, out-of-hospital births, and community-based maternity care to ensure affordability and equitable access across racial and geographic groups.

By broadening access to diverse birthing options, integrating culturally concordant support, and addressing systemic barriers, Colorado can create a perinatal care system that is safe, empowering, and equitable for all families.

# Maternal Mortality

**Data Source: Colorado Department of Public Health and Environment, Maternal Mortality and Findings from the Maternal Mortality Review Committee**

Maternal mortality is a measure of how many people die during pregnancy or within a year after giving birth. It is an important way to understand the health and well-being of our community, because it reflects both medical care and the social and economic conditions that affect families. There are two types of maternal deaths documented and monitored by the State:

- **Pregnancy-related deaths** - a direct result of complications from pregnancy or childbirth
- **Pregnancy-associated deaths** - any deaths during pregnancy or within a year after birth, even if they are not a direct result of pregnancy or childbirth

Tracking these numbers helps us see where care is working, where it is falling short, and where support is needed most. By paying attention to maternal mortality, we can take steps to make pregnancy and the postpartum period safer, improve care, and support the health of families across our community.

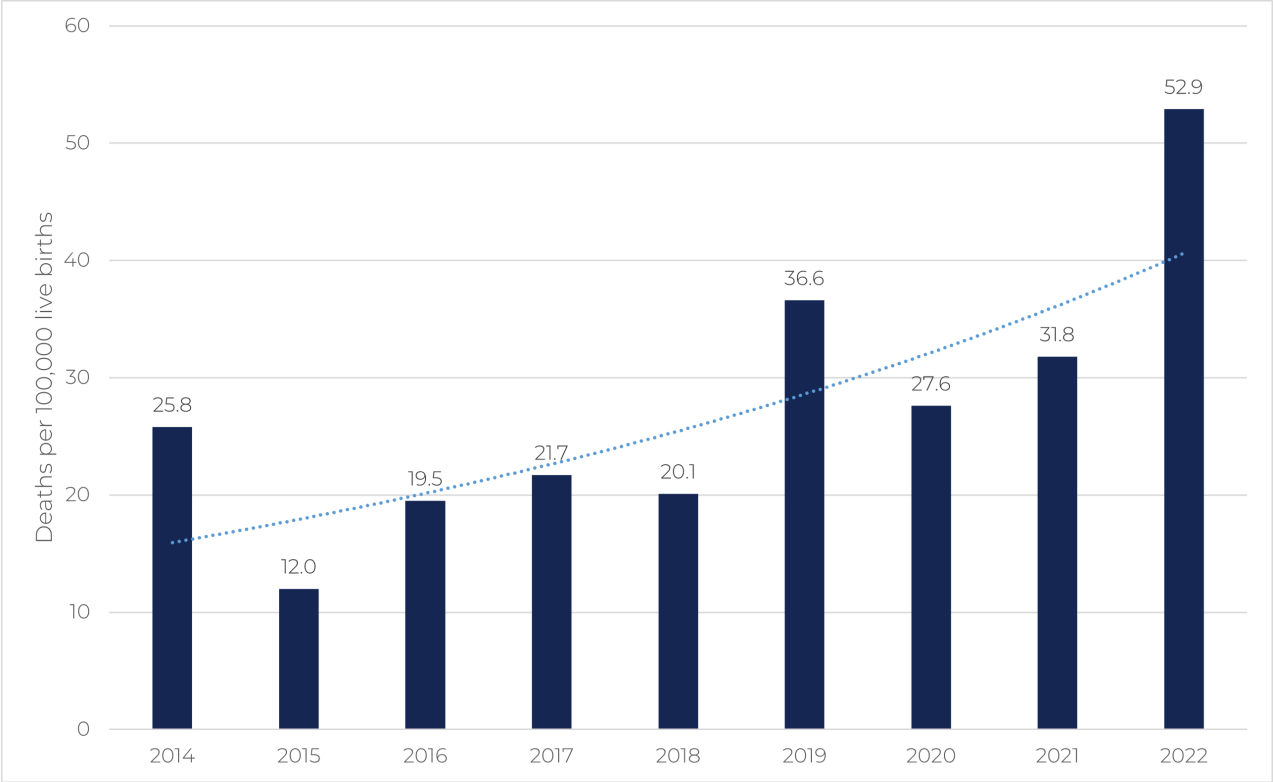



**Figure 7 - Colorado Pregnancy-Related Mortality (Deaths per 100,000 Live Births) between 2014 and 2022**

## Trends in Pregnancy-Related Mortality in Colorado (2014–2022)

Pregnancy-related mortality in Colorado has fluctuated over the past decade but shows a clear and concerning increase in recent years. The mortality ratio was 25.8 deaths per 100,000 live births in 2014, then declined and stabilized between 12.0 and 21.7 from 2015 to 2017. Beginning in 2019, however, rates rose sharply - from 36.6 in 2019 to 27.6 in 2020 and 31.8 in 2021 - reaching a peak of 52.9 deaths per 100,000 live births in 2022. This represents nearly a doubling of risk between 2018 and 2022. See Figure 7.

While multiple factors likely contributed, the COVID-19 pandemic, persistent gaps in healthcare access, workforce shortages, and broader social and economic inequities may have exacerbated maternal health risks. The nine-year average mortality ratio was 27.4 per 100,000, but this value obscures the pronounced escalation in the later years. The data indicate that pregnancy-related mortality in Colorado is worsening, with 2022 marking the highest rate in the period and underscoring a pressing public health concern.

**Inequities in Pregnancy-Related Mortality in Colorado**

Racial disparities in pregnancy-related mortality are stark. Black, non-Hispanic birthing individuals experience a mortality ratio of 57.6 deaths per 100,000 live births - more than double the rate among White, non-Hispanic birthing individuals (25.8). Although White birthing individuals account for a higher number of total deaths (89 compared with 19), this reflects population size rather than risk. The mortality ratio for Black birthing people is more than 120% higher than the state average of 27.4, revealing the extent to which the overall rate masks significant inequities.

These disparities demonstrate that pregnancy-related mortality in Colorado is not evenly distributed and that Black birthing individuals face disproportionately high risks. Addressing these inequities will require targeted, equity-focused strategies that expand access to respectful, culturally responsive care and confront the structural barriers that contribute to preventable maternal deaths. See Figure 8.

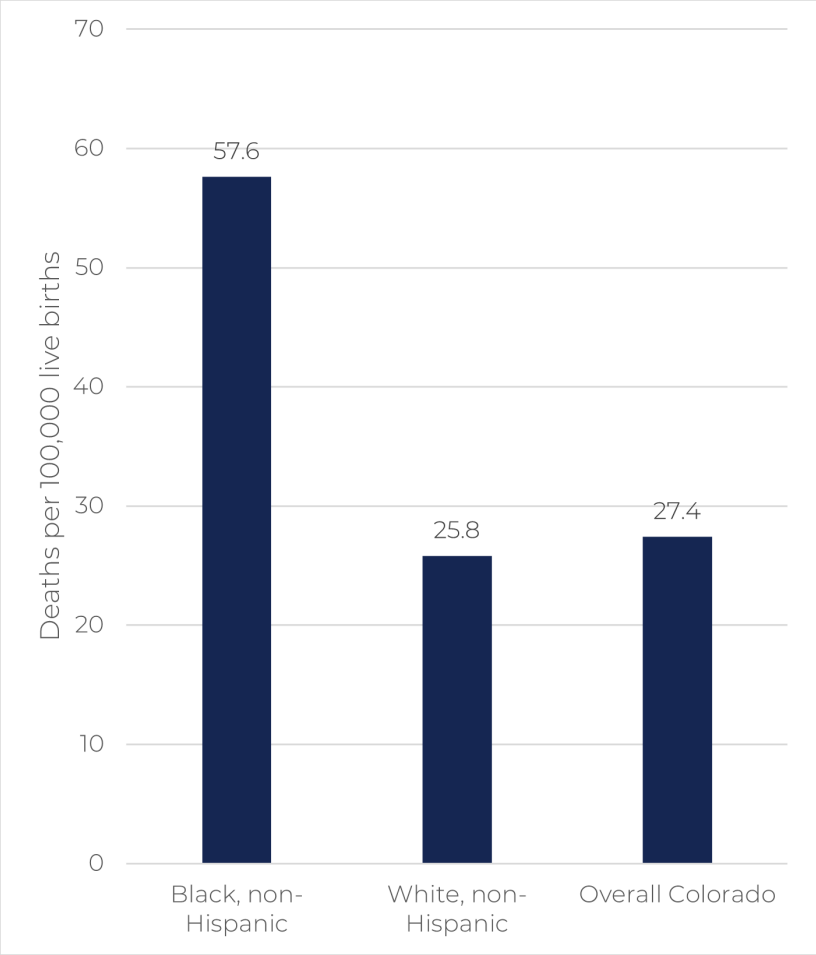



**Figure 8 - Pregnancy-Related Mortality Ratios among non-Hispanic Black and non-Hispanic White Individuals, 2014 - 2022 Combined**

## Causes Associated with Pregnancy-Related Mortality

The Maternal Mortality Review Committee (MMRC) reviews each pregnancy-related death using multiple data sources including interviews and medical chart reviews to determine whether factors such as discrimination, cesarean delivery, substance use, or mental health conditions (other than substance use disorder) were associated with the case. Discrimination is defined as treating someone less favorably based on belonging to a disadvantaged group, and may manifest through differences in care, communication, or shared decision-making across characteristics such as race, insurance status, behavioral health conditions, age, socioeconomic status, or body type. Due to limited sample sizes, the analyses below reflect all pregnancy-related deaths and do not examine causes by race.

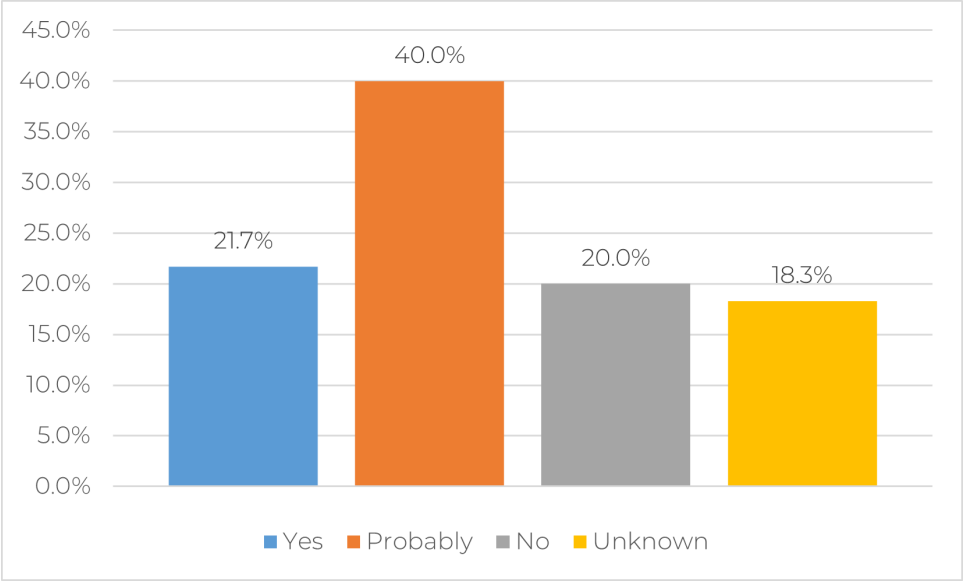



**Figure 9 - Did Discrimination Contribute to the Death as Determined by the Maternal Mortality Review Committee, Percentage of Cases**

## Discrimination as a Contributing Factor in Pregnancy-Related Mortality

Findings indicate that discrimination is a major contributor to pregnancy-related mortality in Colorado. Please refer to Figure 9. Among reviewed cases:

- 21.7% were definitively linked to discrimination.
- 40.0% were probably associated with discrimination.
- 20.0% had no identified link.
- 18.3% were categorized as unknown.

Thus, **in more than 60% of cases, discrimination was identified as a definite or probable factor,** underscoring that pregnancy-related mortality is shaped not only by clinical conditions but also by inequities within healthcare delivery. Discrimination can include dismissal of symptoms, delayed or inadequate treatment, inequitable pain management, poor communication, and structural barriers to timely, high-quality care.

These findings highlight discrimination, both implicit and explicit, as a critical driver of preventable maternal deaths. Efforts to reduce pregnancy-related mortality must therefore prioritize strategies to mitigate bias in clinical settings, strengthen accountability for equitable care, and elevate the experiences of those most marginalized within the perinatal care system.

# Recommendations: Strengthening Accountability, Anti-Bias Training, and Workforce Diversity in Perinatal Care

Reducing maternal mortality and addressing inequities in Colorado requires robust systems of accountability, structured feedback loops, and culturally competent care. Doulas, interprofessional teams, and allied healthcare professionals are uniquely positioned to observe patterns, identify gaps in care, and advocate for systemic improvements. Evidence suggests that empowering these professionals to provide safe, structured feedback can directly contribute to improvements in care quality, patient experience, and health outcomes.

- **Empower Doulas to support patient advocacy and system accountability:** Create formal mechanisms that allow Doulas to safely report observed patterns, near misses, or systemic barriers, while ensuring that their input informs quality improvement initiatives and institutional policy changes.
- **Integrate interprofessional accountability pathways:** Encourage collaborative observation and feedback among healthcare teams - including nurses, physicians, and allied health professionals - so that concerns about bias, care delays, or disparities are addressed in real time and inform ongoing process improvement.
- **Embed anti-bias training into medical education and licensure:** Require anti-bias and cultural humility training during medical and nursing education, and make completion a core component of Continuing Medical Education (CME) and board certification requirements. Training should include actionable strategies for recognizing, reflection on, and mitigating implicit bias in clinical decision-making and communication.
- **Strengthen feedback loops from the Maternal Mortality Review Committee (MMRC):** Develop clear, timely pathways for MMRC findings to inform policy, clinical practice, and community-based programs. Feedback should be actionable, disseminated to relevant stakeholders, and integrated into ongoing quality improvement efforts. Additional insight is needed to better understand how MMRC findings create a feedback loop into individual maternal mortality cases that have been impacted by discrimination.
- **Develop transparent accountability systems:** Establish institutional policies that ensure follow-up on identified gaps or discriminatory practices, including monitoring implementation of corrective actions, evaluating outcomes, and reporting publicly on progress.
- **Expand pipelines to diversify the healthcare workforce:** Invest in programs that encourage students from historically under-represented communities to pursue careers in medicine, nursing, midwifery, and allied health, including scholarships, mentorship, and support for clinical training opportunities. Workforce diversity enhances cultural concordance, trust, and equity in perinatal care.

By combining empowerment, interprofessional accountability, structured anti-bias training, and intentional workforce diversification, Colorado can create a perinatal care system that is both equitable and accountable, reducing preventable maternal deaths and improving outcomes for all families.

**Cesarean Section as a Contributing Factor in Pregnancy-Related Mortality**
The review of pregnancy-related deaths in Colorado indicates that cesarean section played a limited but notable role as a contributing factor. In 13.3% of cases, a cesarean section was identified as contributing to the death, while an additional 3.3% of cases were categorized as "probably" related. Together, these findings suggest that approximately one in six pregnancy-related deaths may have been influenced, at least in part, by complications associated with cesarean delivery. In contrast, 83.3% of cases were determined not to be related to cesarean section, and the remaining cases had insufficient information to assess contribution. Please see Figure 10.

Although cesarean delivery is a critical and often life-saving intervention, it is also a major surgical procedure with inherent risks - including hemorrhage, infection, thromboembolic events, anesthesia complications, and postoperative medical decline. The small but meaningful proportion of deaths linked to cesarean section underscores the importance of ensuring that the use of cesarean delivery aligns with clinical necessity and that individuals who undergo the procedure receive comprehensive, timely, and high-quality perioperative and postpartum care.

This pattern also highlights the broader need to evaluate systems of obstetric decision-making and the clinical circumstances leading to cesarean delivery. For some patients, delayed recognition of complications, ineffective escalation pathways, staffing constraints, or inadequate postoperative monitoring may increase risk. Ensuring equitable, evidence-based, and culturally responsive care before, during, and after cesarean deliveries is essential to improving outcomes.

Although the proportion of cesarean-associated deaths is relatively low, the findings suggest opportunities for improved prevention, particularly through enhanced surveillance, quality review, and targeted support for patients disproportionately affected by obstetric complications. Strengthening these systems can help reduce avoidable harms and reinforce safety across all birthing settings.

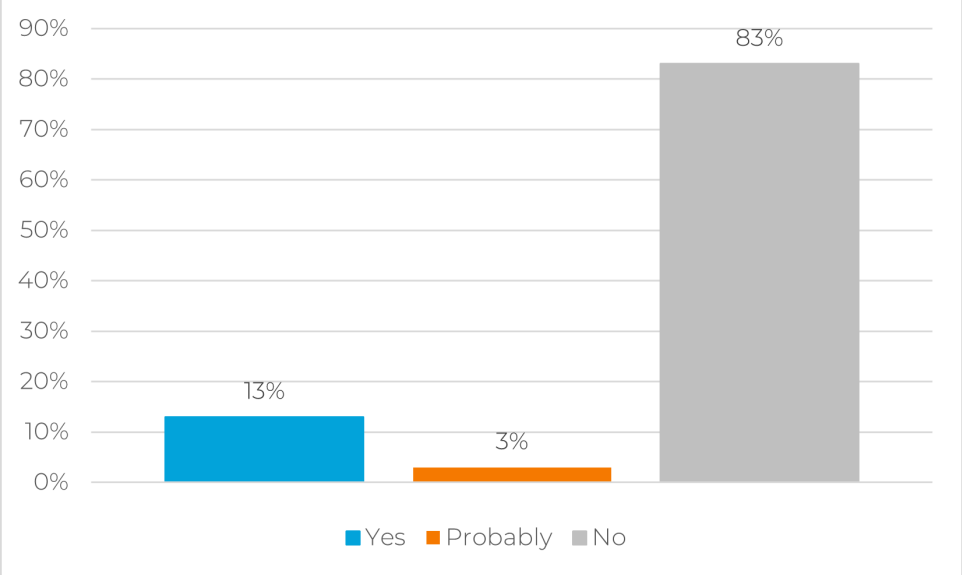



**Figure 10 - Did Cesarean Section Contribute to the Death as Determined by the Maternal Mortality Review Committee, Percentage of Cases (2017 - 2022)**

# Recommendations: Strengthening Practices for Cesarean Section–Related Outcomes

- **Strengthen clinical review of cesarean-related complications.** Conduct deeper case analyses to understand the contexts in which cesarean delivery contributed to maternal death and identify preventable factors.
- **Enhance decision-making support tools.** Expand use of standardized labor management guidelines and evidence-based criteria to ensure cesareans are performed only when medically necessary.
- **Improve perioperative and postoperative monitoring.** Implement consistent, high-reliability monitoring protocols for post-cesarean patients, including timely assessments for hemorrhage, infection, and thromboembolism.
- **Expand access to emergency response resources.** Ensure all birthing facilities, especially those with staffing shortages including low-volume and/or rural hospitals have adequate staffing, rapid escalation pathways, and resources to manage surgical complications.
- **Increase investment in clinician training.** Support continuing education on cesarean risk assessment, bias-free clinical decision-making, and management of obstetric emergencies.
- **Integrate equity considerations into cesarean review processes.** Examine how marginalized groups experience complications or delays in care and address structural drivers of inequity.
- **Monitor cesarean trends across regions and populations.** Track variation in cesarean rates and outcomes by geography, race, and payer status to identify high-risk areas and opportunities for targeted support.

## Mental Health other than Substance Misuse as a Contributing Factor in Pregnancy-Related Mortality

Mental health remains a critical, yet often under-recognized, contributor to pregnancy-related mortality. When reviewing pregnancy-related deaths in this assessment, mental health conditions other than substance misuse were identified as contributing factors in a substantial portion of cases. Please see Figure 11.

According to the case review:

- 32.3% of deaths had a clear indication that mental health conditions contributed.
- An additional 8.9% of cases were assessed as probably involving mental health contributions.
- 47.5% of cases showed no identified mental health contribution.
- 11.4% of cases lacked sufficient information to determine the presence or absence of a mental health-related factor.

Taken together, **more than 40% of all pregnancy-related deaths (Yes + Probably) involved mental health challenges other than substance misuse.** This underscores the profound impact that mood disorders, anxiety disorders, trauma-related conditions, chronic stress, and other psychiatric conditions can have during pregnancy and the postpartum period.

Addressing mental health as a core component of perinatal health rather than an adjunct to physical care is essential to preventing future pregnancy-related deaths. Strengthening continuity of care, expanding access to perinatal mental health specialists, and improving data collection and case review processes will be critical for building a more complete picture of risk and for developing effective, community-informed interventions.

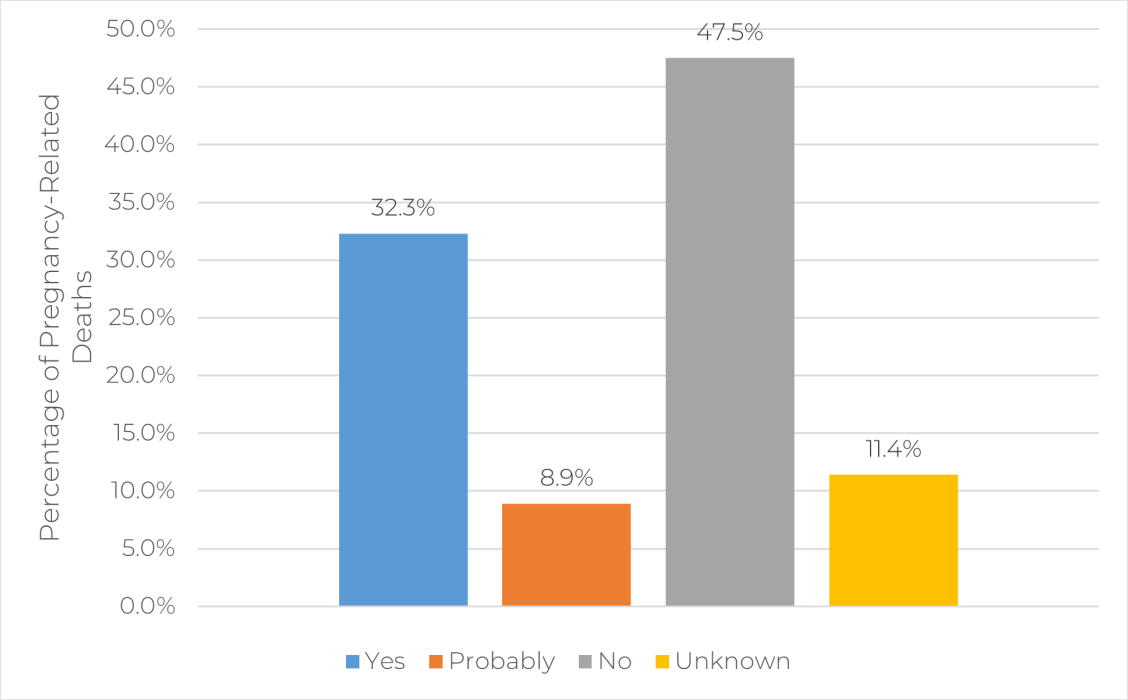



**Figure 11 - Did Mental Health Conditions other than Substance Use Disorder Contribute to the Pregnancy-Related Death as Determined by the Maternal Mortality Review Committee 2014-2022**

# Recommendations: Perinatal Mental Health & Pregnancy-Related Mortality

- **Expand universal perinatal mental health screening** across pregnancy and the full postpartum year, with clear referral pathways for positive screens.
- **Improve access to perinatal mental health clinicians**, including integrated behavioral health, tele-mental health, and culturally grounded community
- **Ensure continuous postpartum coverage** (at least 12 months) and strengthen care transitions to reduce gaps in behavioral health treatment.
- **Embed behavioral health providers** into obstetric and primary care settings to support early detection and timely treatment.
- **Provide comprehensive training** to clinical and community perinatal providers in perinatal mental health, trauma-informed care, suicide-prevention, and interpersonal violence.
- **Expand culturally relevant community-based supports,** including peer support, Doulas, and programs designed with & for impacted communities.
- **Develop perinatal-specific crisis response pathways,** including training for 988 call centers and mobile crisis teams.
- **Enhance postpartum follow-up,** including early check-in visits and home-based supports that include trauma-informed mental health assessments.
- **Address social determinants of mental health,** such as housing insecurity, discrimination, and financial stressors.
- **Strengthen maternal mortality review practices** by ensuring the contribution of mental health expertise and standardized assessment practices.
- **Increase public awareness and reduce stigma** around perinatal mental health needs and available resources.
- **Center justice in all interventions,** with community-led design and focus on populations disproportionately affected by pregnancy-related mortality.

**Substance Misuse as a Contributing Factor in Pregnancy-Related Mortality**
Substance misuse remains a major contributor to pregnancy-related deaths in Colorado. Nearly one in three deaths (29.1%) were directly related to substance misuse, with another 7.0% in which substance use "probably" contributed, indicating that more than one-third of deaths involved substance use as a clear or possible factor. In contrast, 60.8% of deaths were not linked to substance misuse, and 3.2% lacked sufficient information to determine involvement. Please see Figure 12.

These patterns reflect persistent gaps in access to comprehensive, trauma-informed, and perinatal-specific treatment.[1] Many individuals face significant barriers to care such as fear of legal consequences, stigma in healthcare settings, and limited availability of coordinated behavioral health services which delay identification and treatment. Risk is especially heightened in the postpartum period, when overdose is a leading cause of pregnancy-related death nationally and within Colorado.

Overall, these findings highlight the urgent need for coordinated, equitable, and compassionate approaches to perinatal substance use, ensuring timely, culturally responsive, and judgment-free care to reduce preventable deaths and support birthing families across Colorado.

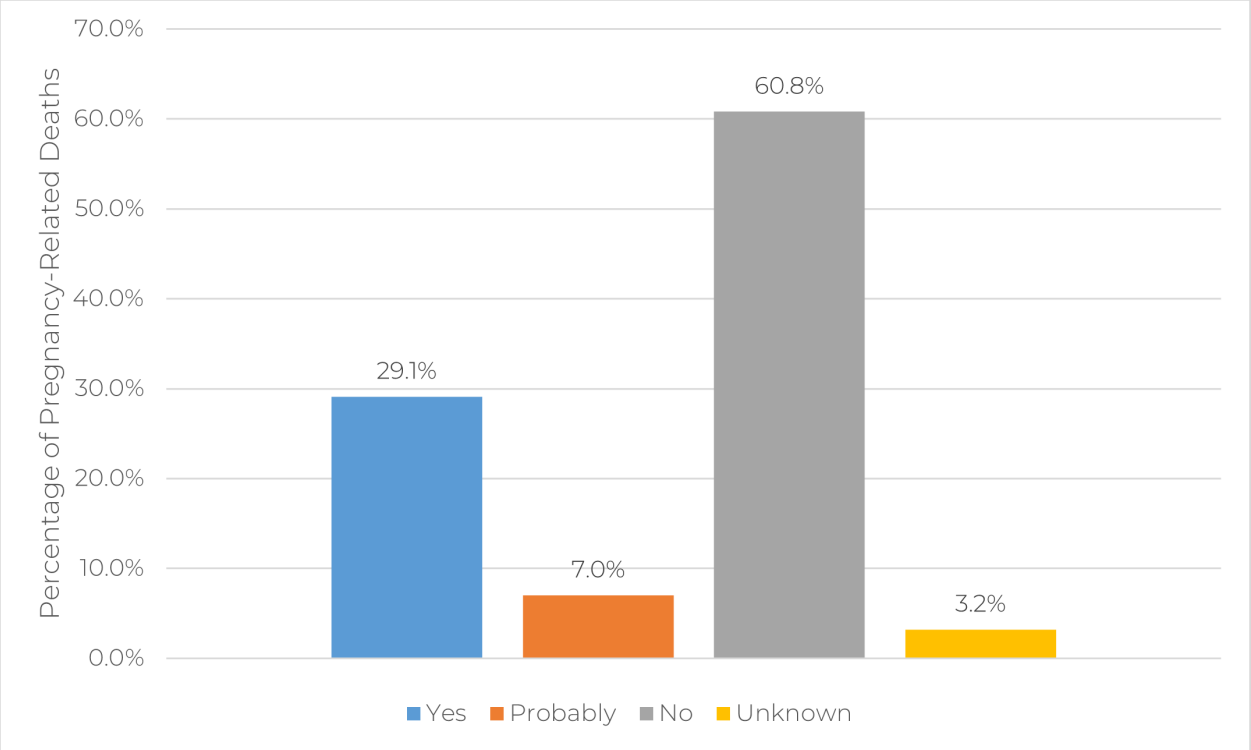



**Figure 12 - Did Substance Use Disorder Contribute to the Pregnancy-Related Death as Determined by the Maternal Mortality Review Committee 2014-2022**

[1] Han, Beth, *et al.* "Pregnancy and postpartum drug overdose deaths in the US before and during the COVID-19 pandemic." JAMA psychiatry 81.3 (2024): 270-283.

# Recommendations: Substance Misuse & Pregnancy-Related Mortality

- **Expand universal substance use screening** using validated, non-punitive tools during pregnancy and throughout the postpartum period.
- **Increase access to perinatal-specific substance use treatment,** including medication-assisted treatment (MAT), residential programs that welcome infants, and outpatient support tailored for pregnancy and parenting.
- **Strengthen care coordination** across prenatal care, behavioral health, primary care, child welfare, and community supports to prevent individuals from falling through gaps.
- **Develop culturally responsive, trauma-informed care models** to reduce fear, stigma, and mistrust that often deter individuals from seeking help.
- **Improve postpartum follow-up and monitoring,** including early touchpoints and home-based supports that include assessment of substance use risk.
- **Integrate behavioral health specialists** within obstetric clinics to facilitate immediate warm handoffs and reduce delays in treatment initiation.
- **Enhance overdose prevention strategies,** including harm reduction education, naloxone distribution, and safe prescribing practices.
- **Address social determinants** associated with substance-related risk, such as unstable housing, unemployment, chronic stress, and discrimination.
- **Reduce administrative and legal barriers to care,** ensuring that substance use during pregnancy is met with treatment - not punishment.
- **Increase workforce training** on perinatal substance use, including best practices for screening, engagement, MAT, and stigma-free care.
- **Empower community-based programs,** peer support networks, and Doulas trained in substance use navigation to support engagement and retention in care.
- **Promote public awareness** on perinatal substance use disorders to reduce stigma and increase understanding of treatment availability and effectiveness.

# Severe Maternal Morbidity

**Data Source: Colorado Hospital Association**

Severe Maternal Morbidity (SMM) refers to unexpected, life-threatening complications during pregnancy, labor, or shortly after birth. These include conditions such as hemorrhage, eclampsia, organ failure, and sepsis - events that can have lasting effects on health, recovery, and family well-being. While maternal deaths are a critical measure, SMM cases are much more common and provide a clearer picture of preventable risks and areas for impact in perinatal care.

In Colorado, new data confirm what national studies have long shown: Black birthing people face a significantly higher risk of SMM compared to White birthing people. These findings highlight the urgent need for clinical and community-based action.

## What the Data Show

Between 2023 and 2024, Colorado hospitals recorded nearly 80,000 deliveries for Black and White birthing individuals. Among these, 9,148 cases of SMM were identified - an overall rate of 1,150 per 10,000 births.

- Black birthing people: 1,504 SMM events per 10,000 births
- White birthing people: 1,123 SMM events per 10,000 births

Black birthing people experienced a 34% higher risk of SMM, with 381 additional cases per 10,000 births compared to White counterparts.

## Which Complications Drive Disparities?

While some conditions occurred at similar rates across groups, several serious complications were far more common among Black birthing people:

- **Hemorrhage** – The most frequent complication overall. Black patients had a 21% higher risk.
- **Blood transfusion** – Black patients were 60% more likely to require transfusion.
- **Hypertensive disorders (eclampsia)** – Risk was 3.7 times higher among Black birthing people.
- **Acute organ failure** – Including renal failure (2.2 times higher) and respiratory distress (2.3 times higher).
- **Cerebrovascular complications** – Rare but extremely dangerous, and nearly five times higher for Black patients.

Not all SMM indicators demonstrated significant racial differences. Hysterectomy, shock, pulmonary edema, sepsis, mechanical ventilation, embolism, and cardiac arrest occurred at similar rates in both groups. Please see Figure 13 on the following page.

## What This Means for Families

Behind every SMM event is a birthing person whose life was suddenly at risk, and a family navigating the aftermath. Complications like hemorrhage or organ failure often result in longer hospital stays, repeat clinic visits, and ongoing health challenges. They can also disrupt bonding with a newborn, contribute to postpartum depression or trauma, and create lasting emotional and financial strain for families.

For Black families in Colorado, the higher burden of SMM compounds existing inequities in infant health outcomes, creating cycles of stress, grief, and mistrust in health systems.

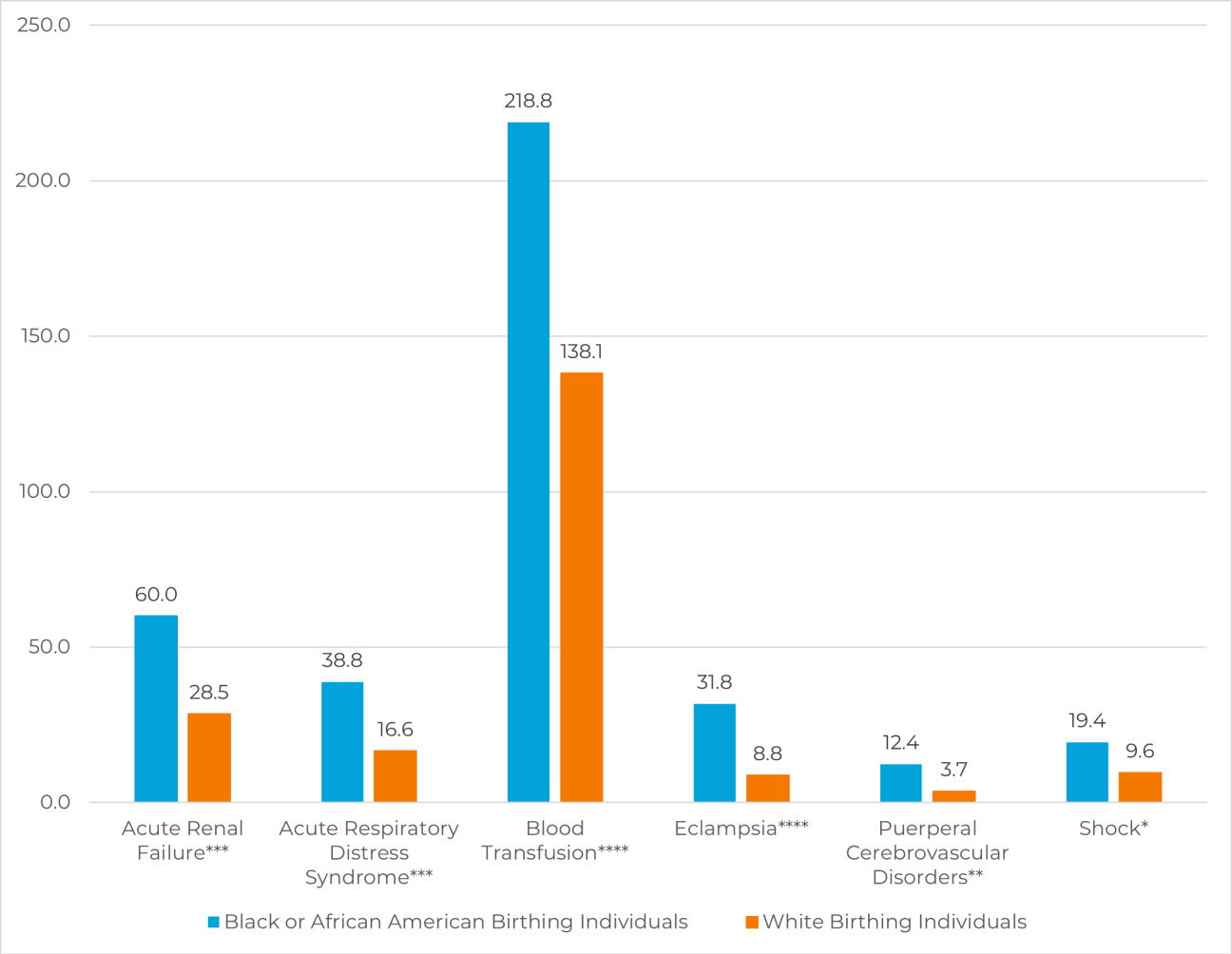



**Figure 13 - Statistically Significant Differences in Severe Maternal Morbidity Event Rates (per 10,000 deliveries) between Black Birthing Individuals and White Birthing Individuals in Colorado. 2023 - 2024**

*p<0.05, **p<0.01, ***p<0.001, ****p<0.0001

Colorado's data show that SMM disparities are not inevitable - they are shaped by the systems in which families give birth. Some conditions showed no differences by race, which means equitable outcomes are possible when care is consistent and responsive.

For practitioners, this is both a challenge and an opportunity:

- Challenge: Black birthing people in Colorado remain at significantly higher risk of life-threatening complications.
- Opportunity: With standardized care, early intervention, and culturally informed support, many of these events can be prevented or their severity reduced.

# Recommendations and Implications for Practice

Practitioners across Colorado have a pivotal role to play in closing these gaps. The data suggest three areas of immediate action:

**Early Detection and Rapid Response**

- Apply standardized protocols for hemorrhage and hypertension consistently.
- Ensure early warning signs (like severe headaches, swelling, or abnormal bleeding) are never dismissed, including reports from patients, partners, and family members.
- Ensure that prenatal and pregnancy classes include the identification and action regarding Urgent Maternal Health Warning Signs.
- Ensure that birth workers including Doulas receive training regarding Severe Maternal Morbidity events, including prevention, inequities, and advocacy.

**Bias Recognition and Accountability**

- Acknowledge that Black patients' symptoms are too often minimized.
- Universally implement team-based checklists to reduce variability in recognition and response.
- Implement implicit bias and anti-racism training for all healthcare providers in perinatal spaces to improve practitioner self-reflection, clinical practice, and collaboration.
- Implement transparent and trusted accountability systems for patients who experience racist and biased practices.

**Family-Centered and Culturally Responsive Care**

- Partner with Doulas, community health workers, and culturally concordant care providers to strengthen communication and advocacy during labor and postpartum.
- Support community-based education and screenings to discuss early warning signs, monitoring, and advocacy.
- Provide in-depth mental health and social postpartum support for families who experience complications including attention to emotional and physical recovery, infant bonding, and lactation/feeding preferences.

# Perinatal Care Utilization

**Data Source: Center for Improving Value in Healthcare**

Access to quality prenatal and postpartum care is critical for the health of birthing individuals and infants. Regular visits help identify risks, prevent complications, and connect families to necessary support. Data from Colorado's All Payer Claims Database (2023–2024) provide insight into care utilization during and after pregnancy, including overall pregnancy-related visits, trimester-specific care, standard prenatal visits, and postpartum visit attendance.

Data from Colorado's All Payer Claims Database from 2023–2024 provide insight into how often pregnant people accessed care during and after pregnancy including the following information:

- Overall Pregnancy-Related Care - including all care connected to pregnancy (such as emergency visits, prenatal testing, and treatment for complications).
- Pregnancy-Related Care by Trimester
- Standard Prenatal Care - including only routine, scheduled appointments that monitor a pregnancy.
- Standard Prenatal Care by Trimester
- Postpartum Visit Attendance

| | Black/African American Alone, Non-Hispanic | White Alone, Non-Hispanic |
|---|---|---|
| Total Deliveries | 10,210 | 60,566 |
| Adjusted Standard Prenatal Care Visits Mean**** | 7.06 | 6.32 |
| Adjusted Standard Prenatal Care Visits First Trimester* | 1.09 | 1.06 |
| Adjusted Standard Prenatal Care Visits Second Trimester*** | 1.42 | 1.34 |
| Adjusted Standard Prenatal Care Visits Third Trimester | 1.49 | 1.52 |
| Adjusted Pregnancy Related Care Visits Mean**** | 11.34 | 10.04 |
| Adjusted Pregnancy Related Care Visits in First Trimester**** | 1.35 | 1.20 |
| Adjusted Pregnancy Related Care Visits in Second Trimester**** | 1.86 | 1.65 |
| Adjusted Pregnancy Related Care Visits in Third Trimester** | 2.11 | 2.04 |
| Adjusted Postpartum Visits**** | 0.93 | 0.99 |

*p≤0.05, **p≤0.01, ***p≤0.001, ****p≤0.00001

**Table 6 - Mean Number of Adjusted Standard Prenatal Care Visits, Adjusted Pregnancy-Related Care Visits, and Postpartum Visits by Race, Colorado, 2023 - 2024**

Key Findings:

- **Pregnancy-Related Care:** Black/African American birthing people had more total pregnancy-related visits on average (11.34) than White birthing people (10.04).
- **Standard Prenatal Care:** Black birthing people also attended slightly more standard prenatal visits overall (7.06 vs. 6.32), particularly in the first and second trimesters.
- **Postpartum Care:** Postpartum visit attendance was lower among Black birthing people (0.93) compared to White birthing people (0.99).

Please refer to Table 6 on the previous page.

These patterns show that while Black birthing people attend more prenatal visits than White birthing people, trimester-specific visit averages remain below recommended levels. During 2023–2024, The American College of Obstetricians & Gynecologists (ACOG) guidelines suggested roughly four visits in the first and second trimesters and seven to nine visits in the third trimester for low-risk pregnancies. Updated 2025 recommendations emphasize individualized care based on medical, social, and structural determinants, noting that the traditional 12–14 visit schedule may not fit all needs. Please refer to Figure 14.

Despite higher prenatal visit attendance described here, Black birthing individuals continue to experience disproportionately high maternal morbidity and mortality. Ensuring equitable outcomes requires not only supporting visit timing and attendance but also improving the quality of care during these encounters. Strengthening postpartum support, expanding access to community-based providers such as Doulas of Color and peer navigators, and holding health systems accountable are essential steps. Transforming how care is delivered and experienced will help ensure that every birthing person - and every family - has the opportunity to thrive.

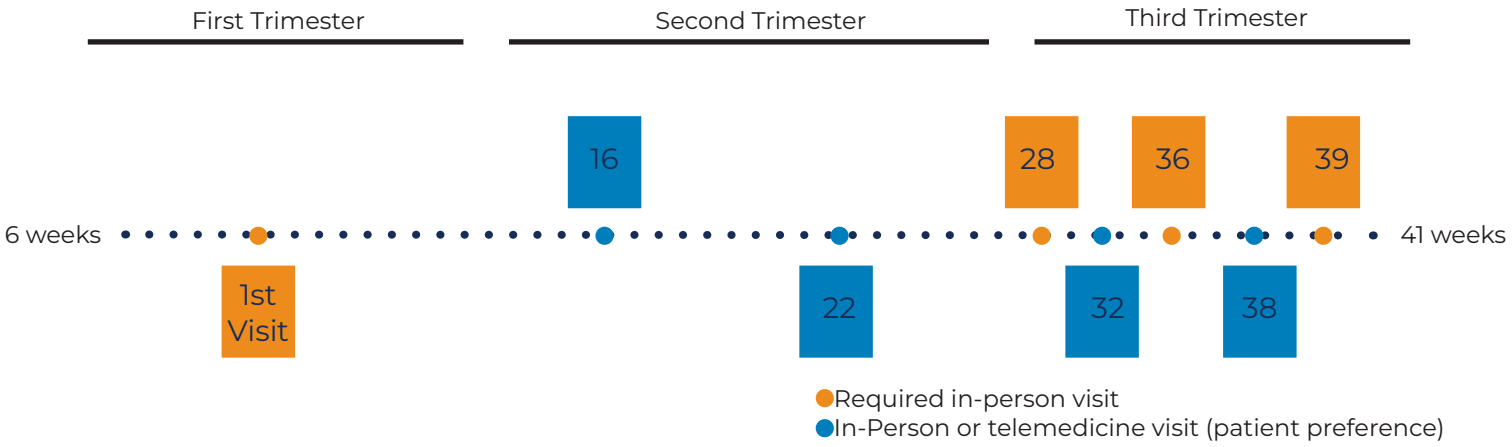



**Figure 14 - Recommended Standard Prenatal Care Schedule for Patients without Medical Conditions. Adapted from the American College of Obstetricians & Gynecologists.**

# Recommendations to Improve Prenatal and Postpartum Care Access and Outcomes

Ensuring that every birthing person receives timely, high-quality, culturally responsive prenatal and postpartum care is essential to improving maternal and infant health in Colorado. The data presented in this report highlight important strengths - such as higher prenatal care utilization among Black pregnant individuals - as well as persistent gaps, including lower postpartum visit attendance and continued inequities in maternal morbidity and mortality. These findings point to the need for coordinated, community-driven, and system-level action. The following recommendations outline key opportunities to strengthen care access, improve quality, and advance equity across the perinatal period.

- **Strengthen early and continuous prenatal care engagement.**
  Expand strategies that support pregnant individuals in initiating care early and maintaining care throughout pregnancy - particularly during the first and second trimesters where visit counts remain far below recommended benchmarks.

- **Align state practice with updated ACOG prenatal care guidelines.**
  Support provider education and system-wide implementation of the 2025 ACOG visit structure, ensuring care plans are tailored to individuals' medical, social, and structural determinants of health rather than relying on outdated one-size-fits-all models.

- **Improve the quality - not only the quantity - of prenatal visits.**
  Ensure visits are meaningful, patient-centered, trauma-informed, and culturally responsive, acknowledging that increased visit numbers among Black pregnant individuals have not translated into improved maternal outcomes.

- **Strengthen postpartum care engagement.**
  Increase outreach, scheduling support, and culturally congruent services to ensure birthing people attend postpartum visits within recommended timeframes.

- **Ensure equitable access to comprehensive postpartum supports.**
  Enhance screening and follow-up for hypertension, mental health, recovery complications, lactation needs, and psychosocial supports to reduce preventable postpartum risks.

- **Expand access to community-based perinatal support providers.**
  Increase investment in Doulas of Color, community health workers, lactation support specialists, and peer navigators who improve trust, navigation, and continuity of care for Black and other marginalized birthing communities.

- **Improve data systems that track prenatal/postpartum visit timing, quality, and outcomes.**
  Strengthen mechanisms to link claims data, clinical data, and community-based program data to better identify gaps in care, opportunities for improvement, and inequities affecting specific populations.

- **Prioritize anti-racist systems improvement efforts.**
  Use evidence to drive organizational and state wide policy changes focused on dismantling structural racism within perinatal care, ensuring that services promote dignity, safety, and justice for Black families.

- **Support collaborative, community-centered approaches to maternal health.**
  Engage communities directly in problem-solving, program design, and evaluation to ensure initiatives reflect lived experiences and address needs identified by those most affected.

# Neonatal Outcomes: Mortality, Preterm Births, and Low Birth-Weight Babies

**Data Source: Colorado Department of Public Health and Environment, 2020 - 2024**

Infant health outcomes including mortality, low birth weight, and preterm birth are widely recognized as sentinel indicators of population health. Elevated rates in these measures reflect underlying differences in access to healthcare, cumulative exposure to social and economic stressors, and the enduring impact of structural injustice. The consequences extend beyond individual families, contributing to intergenerational health disparities and imposing significant societal costs. Infant health outcomes are correlated to cognitive, emotional, and physical development across the life course, demonstrating the need for perinatal support strategies that impact both the birthing person and their infant.

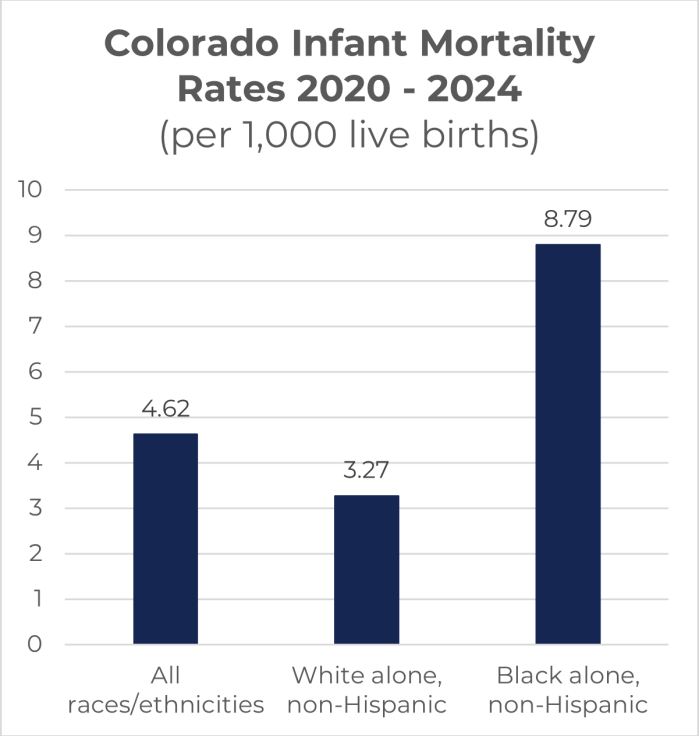



**Figure 15 - Colorado Infant Mortality Rates 2020 - 2024 by Birthing Person Race**

## Neonatal Mortality

Between 2020 and 2024, there were 312,370 live births in Colorado, which resulted in 1,444 infant deaths, yielding an overall infant mortality rate of 4.62 per 1,000 live births. However, outcomes varied substantively for Black/African American infants compared to white infants. Babies born to Black non-Hispanic birthing people experienced the most pronounced disparities, with an infant mortality rate of 8.79 per 1,000 live births, more than double that of White non-Hispanic infants (3.27 per 1,000). Babies born to Black non-Hispanic birthing people also had the highest prevalence of adverse birth outcomes, with 13.73% born preterm and 15.68% born low birth weight. Please refer to Figure 15.

An examination of infant health outcomes through state wide averages can obscure deep injustice within communities. Breaking down outcomes by ZIP code provides a clearer and more accurate picture of how race, place, and structural inequities intersect. In many states and in Colorado, infant mortality and morbidity rates vary dramatically from one ZIP code to another, even within the same county or city. These differences often mirror patterns of racial segregation, poverty, access to healthcare, and environmental conditions, showing that where a family lives is directly tied to their infant's chances of survival and healthy development.

Several ZIP codes demonstrated infant mortality rates for infants born to Black birthing people over two times the overall state-rate of infants born to white birthing people, including Denver ZIP codes of 80204, 80249, 80239, 80220, Aurora ZIP codes 80019, 80010, 80011, 80012, 80017, Commerce City ZIP code 80022, and Colorado Springs ZIP codes 80918, 80917, and 80916. These disparities persist when comparing ZIP code specific infant mortality rates between infants born to Black birthing people compared to infants born to white birthing people. Please see Table 7.

| City / Neighborhood | | ZIP Code | Number of live births born to Black birthing people | Number of infant deaths born to Black birthing people | Infant mortality rate Black (per 1,000 live births) | Number of live births born to white birthing people | Number of infant deaths born to white birthing people | Infant mortality rate white (per 1,000 live births) | High end infant mortality rate/ estimate |
|---|---|---|---|---|---|---|---|---|---|
| **Denver** | **Baker, Barnum, Civic Center, Lincoln Park, Sun Valley, West Colfax** | 80204 | 176 | 3 | 17.05 | 761 | * | * | 2.63 |
| | **East Colfax, Montclair, South Park Hill, Hilltop, Lowry** | 80220 | 220 | 5 | 22.73 | 1,337 | * | * | 1.5 |
| | **Hampden, Indian Creek** | 80231 | 489 | 3 | 6.13 | 785 | 4 | 5.1 | 2.55 |
| | **Montbello** | 80239 | 483 | 5 | 10.35 | 325 | * | * | 6.15 |
| | **Windsor, Winston Downs, Aurora** | 80247 | 601 | 3 | 4.99 | 464 | * | * | 4.31 |
| | **Green Valley Ranch** | 80249 | 748 | 9 | 12.03 | 504 | 5 | 9.92 | 3.97 |
| **Aurora** | | 80010 | 458 | 5 | 10.92 | 514 | * | * | 3.89 |
| | | 80011 | 664 | 9 | 13.55 | 492 | * | * | 4.07 |
| | | 80012 | 821 | 7 | 8.53 | 702 | * | * | 2.85 |
| | | 80017 | 589 | 5 | 8.49 | 753 | 5 | 6.64 | 2.66 |
| | | 80019 | 165 | 3 | 18.18 | 180 | * | * | 11.11 |
| **Commerce City** | | 80022 | 190 | 3 | 15.79 | 1,380 | * | * | 1.45 |
| **Colorado Springs** | | 80916 | 367 | 5 | 13.62 | 1,300 | 4 | 3.08 | 1.54 |
| | | 80917 | 102 | 4 | 39.22 | 1,031 | * | * | 1.94 |
| | | 80918 | 120 | 3 | 25 | 1,609 | 10 | 6.22 | 1.24 |

* Indicates fewer than three events in the category.

**Table 7 - ZIP Codes Demonstrating Black Infant Mortality Rates over Two Times Statewide White Infant Mortality Rates Compared to within ZIP Code White Infant Mortality Rates and Estimates**

Data demonstrate that even within the same ZIP codes, Black birthing individuals face higher infant mortality rates than their white neighbors, underscoring the deep influence of structural factors on health. People living side by side often share similar access to healthcare, transportation, housing, and other resources, yet racial gaps in infant mortality persist. These differences reflect the cumulative impacts of structural racism and long-term disinvestment in communities of color. Examining disparities at the ZIP code level helps identify where supports are most needed and reinforces that system-level solutions - not just clinical interventions - are essential for reducing infant mortality.

## Preterm Birth

Preterm birth rates (babies born at less than 37 weeks gestation) are a key population health metric as they reflect both the health of birthing people and the broader social and environmental community conditions that influence pregnancy outcomes. High rates of preterm birth can indicate gaps in access to quality prenatal care, exposure to chronic stress, or inequities in living conditions. Tracking these rates helps identify communities at greater risk and guides the development of tailored services and supports - such as early intervention, maternal health programs, and social resource investments - that can improve outcomes for both parents and infants. Please see Figure 16.

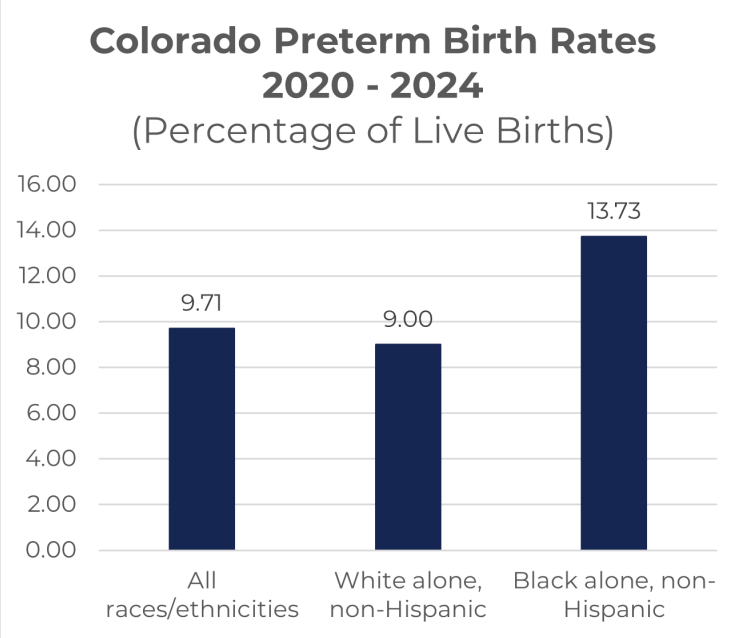



**Figure 16 - Colorado Preterm Birth Rates 2020 - 2024 by Birthing Person Race**

Between 2020 and 2024, Colorado recorded 30,340 preterm births, representing a state wide preterm birth rate of 9.71%. Among White birthing people, 9.00% of babies were born preterm, compared with 13.73% among Black birthing people - a statistically significant difference ($p < 0.00001$). Please see Figure 16. These disparities, however, vary widely by ZIP code. In 33 Colorado ZIP codes, babies born to Black birthing people experience more than **double** the state wide preterm birth rate observed among babies born to White birthing people. Within these same ZIP codes, preterm birth rates for Black birthing individuals remain consistently higher - ranging from 1.5 to nearly 6 times the rates of their White neighbors. In 25 of the 33 ZIP codes, these within-area differences are statistically significant, indicating that the gaps are unlikely to be due to random variation. While simple percentages illustrate the scale of disparity, significance testing underscores that these patterns reflect underlying systemic factors which may be driving unequal outcomes. Please see Table 8.

| ZIP Code | Preterm Birth Percentage, Black Birthing People | Preterm Birth Percentage, White Birthing People |
|---|---|---|
| 80808**** | 57.1% | 9.7% |
| 80121*** | 50.0% | 8.7% |
| 81212** | 42.9% | 10.4% |
| 80214**** | 33.3% | 9.1% |
| 80234**** | 31.3% | 11.5% |
| 81004** | 30.8% | 10.9% |
| 80122** | 29.4% | 7.9% |
| 80640** | 28.6% | 8.8% |
| 80907**** | 28.3% | 10.5% |
| 80236**** | 26.5% | 6.8% |
| 80620* | 25.8% | 11.3% |
| 81501* | 25.0% | 9.7% |
| 80218*** | 23.7% | 8.6% |
| 80004 | 23.1% | #N/A |
| 80909*** | 22.8% | 9.3% |
| 80915** | 22.6% | 11.2% |
| 80033* | 22.2% | 8.3% |
| 80501* | 22.2% | 7.6% |
| 81504 | 21.4% | 8.8% |
| 80232 | 21.1% | 11.5% |
| 80235 | 21.1% | 9.7% |
| 80207**** | 21.0% | 5.6% |
| 80223** | 20.7% | 9.3% |
| 80206 | 20.0% | 8.1% |
| 80226 | 19.5% | 10.1% |
| 80113 | 19.4% | 9.5% |
| 80221** | 19.3% | 8.8% |
| 80228 | 19.1% | 8.8% |
| 81008 | 19.1% | 12.5% |
| 80219*** | 18.6% | 8% |
| 80134** | 18.5% | 8.6% |
| 80205**** | 18.4% | 8.7% |
| 80817*** | 18.1% | 9.3% |
| *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001 | | |

**Table 8 - Colorado ZIP Codes where Black Preterm Birth Rates are more than Double the Statewide White Preterm Birth Rate**

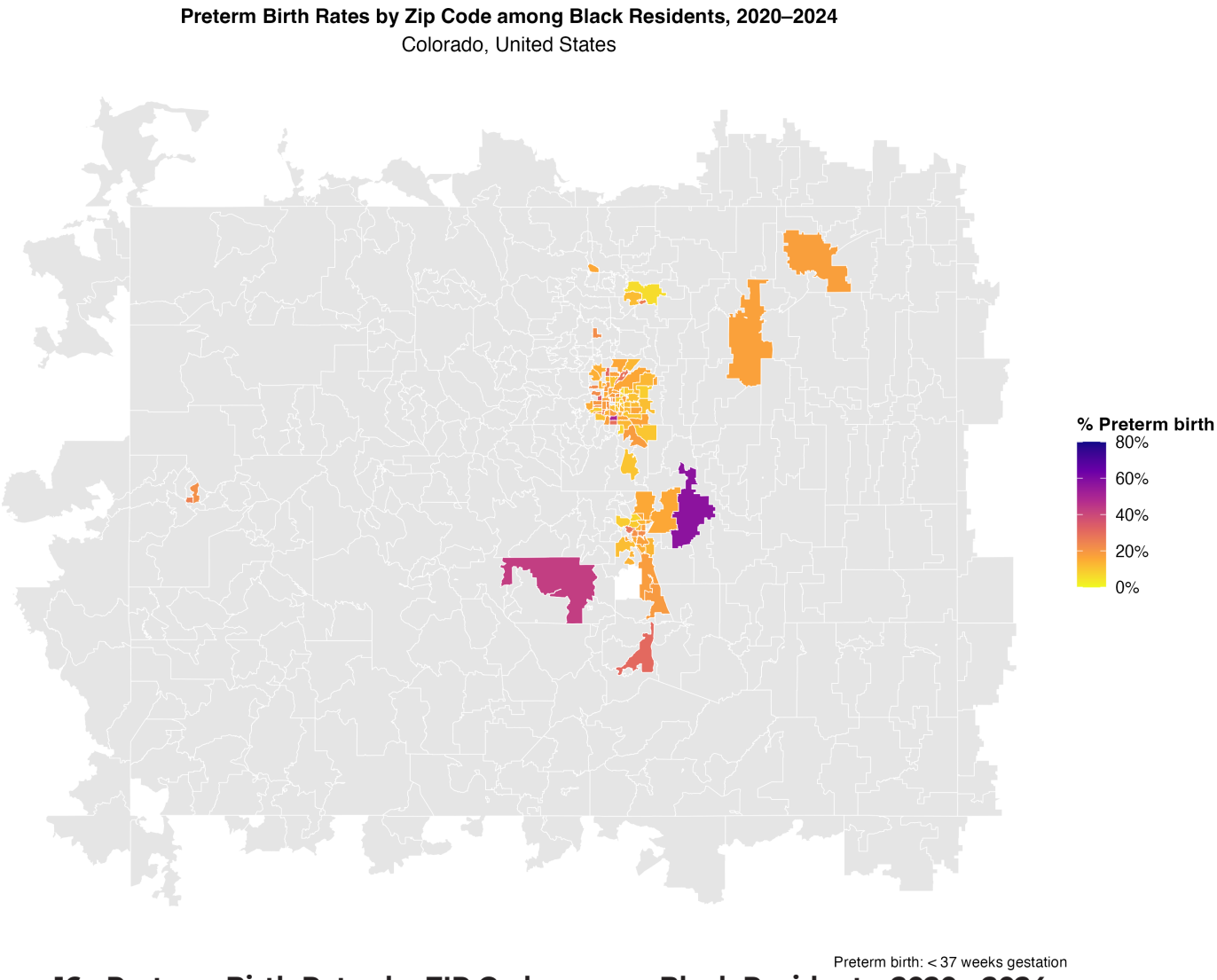



**Figure 16 - Preterm Birth Rates by ZIP Code among Black Residents, 2020 - 2024**

Four Colorado ZIP codes demonstrate a lower rate of preterm births for Black birthing individuals compared to white birthing individuals, including ZIP codes in Denver (80239), Colorado Springs (80918 and 80920), and Greeley (80631). While these four ZIP codes demonstrated lower rates of preterm birth, data from only one ZIP code ( 80631) demonstrated statistical significance when comparing rates of preterm birth within ZIP code for Black birthing people compared to white birthing people. Please see Table 9.

| ZIP Code | Preterm Birth Percentage, Black Birthing People | Preterm Birth Percentage, White Birthing People |
|---|---|---|
| 80239 | 9.7% | 10.8% |
| 80918 | 9.2% | 10.9% |
| 80920 | 7.0% | 8.8% |
| 80631* | 5.8% | 10.6% |
| *p<0.05 | | |

**Table 9 - Colorado ZIP Codes Where Black Preterm Birth Rates are lower than ZIP Code White Preterm Birth Rates**

## Low Birth-Weight Babies

Birth weight, like preterm birth, is a critical measure of maternal and infant health as it reflects the broader social, economic, and environmental conditions that shape pregnancy outcomes. Low birth-weight can signal underlying challenges such as chronic stress, limited access to nutritious food, exposure to adverse living conditions, and barriers to quality prenatal care. Tracking birth-weight patterns across populations helps identify health inequities, direct resources to communities most in need, and evaluate the impact of maternal and infant health programs.

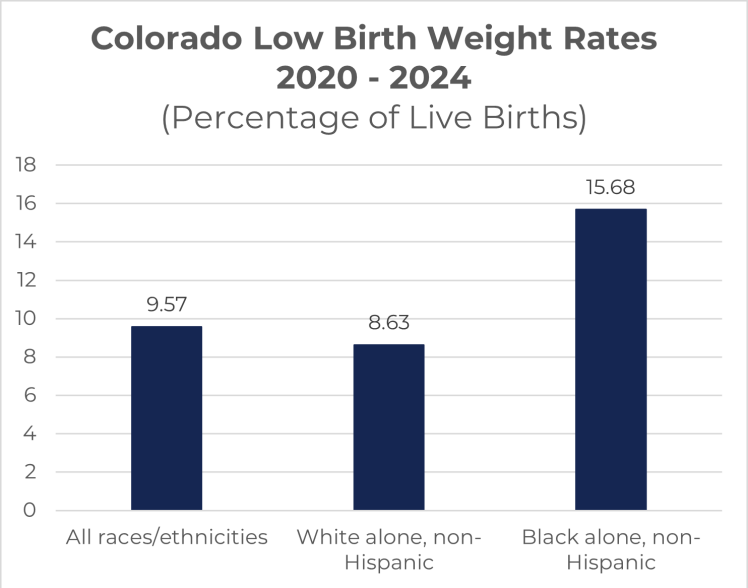



**Figure 17 - Low Birth-Weight Rates 2020 - 2024 by Birthing Person Race**

Between 2020 and 2024, 29,886 babies in Colorado were born weighing less than 2,500 grams, resulting in a state wide low birth-weight rate of 9.57%. Among White birthing people, 8.63% of babies were born at low birth-weight, compared with 15.68% among Black birthing people - a statistically significant difference ($p < 0.00001$). See Figure 17. These disparities vary substantially by ZIP code. In 50 ZIP codes, babies born to Black birthing people experience more than double the state wide low birth-weight rate observed among babies born to White birthing people. Within those same areas, low birth-weight rates for Black birthing people remain consistently higher - between 1.5 and 6.8 times the rates of their White neighbors. In 33 of the 50 ZIP codes, these differences are statistically significant, indicating that the patterns are unlikely to be due to random variation. While simple percentages illustrate the scale of inequity, significance testing reinforces that these disparities reflect underlying systemic forces shaping maternal and infant health. See Table 10.

| ZIP Code | Low Birth-Weight Percentage, Black Birthing People | Low Birth-Weight Percentage, White Birthing People |
|---|---|---|
| 81212**** | 57.1% | 9.0% |
| 80121**** | 50.0% | 7.3% |
| 81050*** | 44.4% | 7.7% |
| 80108**** | 42.9% | 7.7% |
| 80401*** | 33.3% | 7.5% |
| 80214**** | 31.6% | 8.5% |
| 80234*** | 31.3% | 10.5% |
| 81004** | 30.8% | 10.9% |
| 80203**** | 30.6% | 6.6% |
| 80218**** | 28.8% | 8.6% |
| 81008** | 28.6% | 9.9% |
| 80120*** | 27.8% | 7.0% |
| 80206* | 26.7% | 10.1% |
| 80232* | 26.3% | 11.3% |
| 80907*** | 24.5% | 8.5% |
| 80246** | 24.0% | 10.1% |
| 80640* | 23.8% | 8.5% |
| 80207**** | 22.9% | 7.2% |
| 80113* | 22.6% | 9.6% |
| 80138** | 22.6% | 7.2% |
| 80915*** | 22.6% | 9.7% |
| 80223**** | 22.4% | 6.9% |
| 80111** | 22.2% | 7.6% |
| 80501* | 22.2% | 7.6% |
| 80205**** | 21.9% | 10.0% |

| ZIP Code | Low Birth-Weight Percentage, Black Birthing People | Low Birth-Weight Percentage, White Birthing People |
|---|---|---|
| 80521 | 21.1% | 10.4% |
| 80209 | 20.8% | 9.4% |
| 80909*** | 20.6% | 9.7% |
| 80212 | 20.0% | 7.5% |
| 80524 | 20.0% | 7.9% |
| 80603 | 20.0% | 8.4% |
| 80204**** | 19.9% | 9.2% |
| 80226 | 19.5% | 10.0% |
| 80003 | 19.4% | 10.0% |
| 80020 | 19.1% | 8.0% |
| 80228 | 19.1% | 8.9% |
| 80233** | 19.1% | 8.8% |
| 80010** | 18.8% | 11.9% |
| 80002 | 18.8% | 7.9% |
| 80219*** | 18.6% | 8.0% |
| 80924** | 18.4% | 6.8% |
| 80013**** | 18.2% | 9.3% |
| 80260 | 18.0% | 10.6% |
| 80216 | 17.7% | 10.7% |
| 80023 | 17.7% | 6.2% |
| 80122 | 17.7% | 6.9% |
| 80236 | 17.7% | 7.9% |
| 80919 | 17.7% | 8.6% |
| 81005 | 17.7% | 10.0% |
| 80022*** | 17.4% | 8.8% |

*p<0.05, **p<0.01, ***p<0.001, ****p<0.0001

**Table 10 - Colorado ZIP Codes Where Black Low Birth- Weight Rates are More Than Double the Statewide White Low Birth-Weight Rate**
Data demonstrate the low birth-weight rate for infants born to Black birthing individuals compared to the low birth-weight rate birth rate for infants born to white birthing individuals in the same ZIP Code. Significance levels indicate differences between rates within ZIP code.

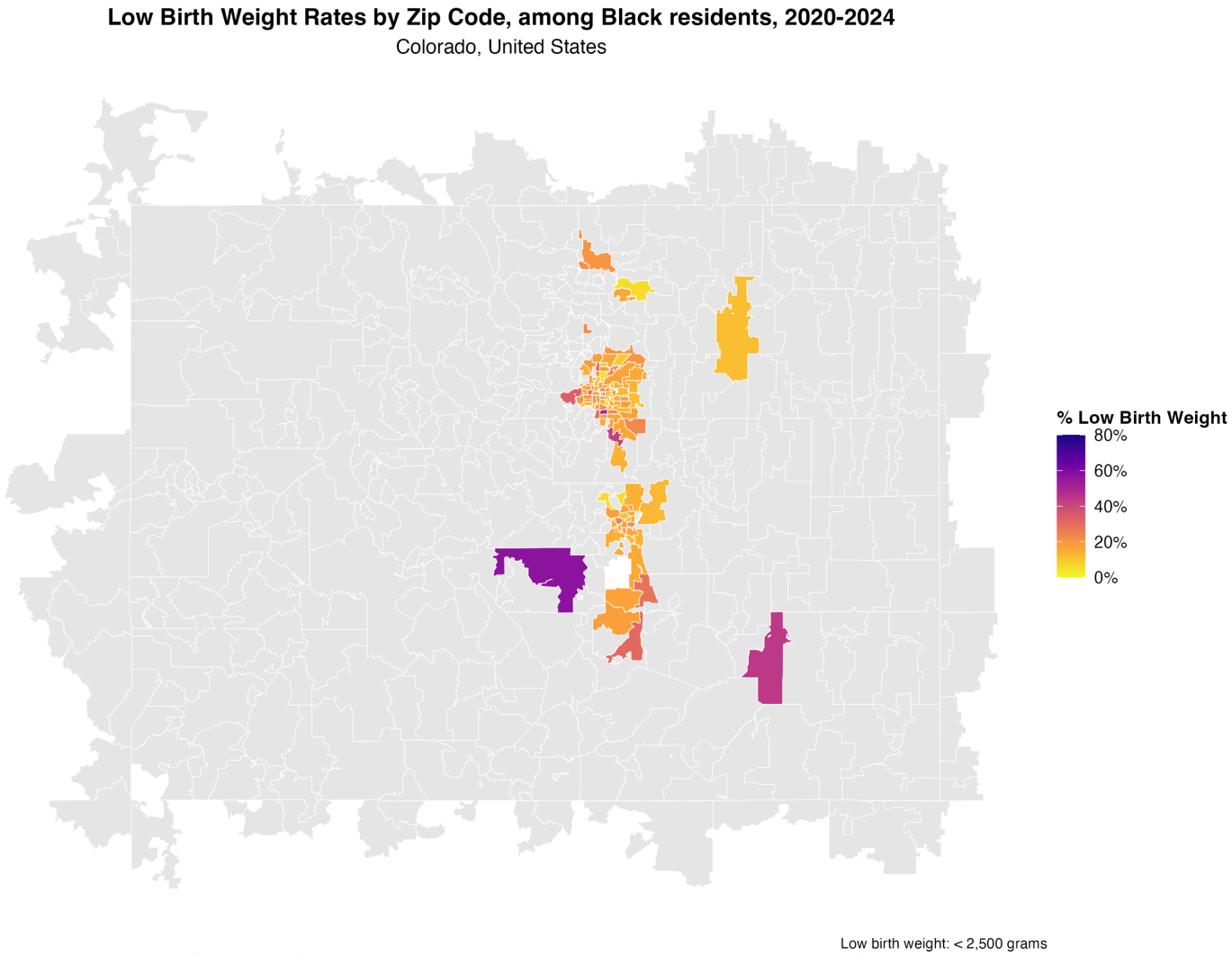



**Figure 18 - Low Birth Weight Rates by ZIP Code among Black Residents, 2020 - 2024**

Four Colorado ZIP codes demonstrate a lower rate of low birth-weight babies for Black birthing individuals compared to white birthing individuals, including ZIP codes in Denver/Arapahoe County including Holly Hills (80222), Thornton (80229), Colorado Springs (80921), and Greeley (80631). While four ZIP codes demonstrated lower rates of low birth-weight babies, data from only one ZIP code (80631) demonstrated statistical significance. Please see Table 11.

| ZIP Code | Low Birth-weight %, Black Birthing People | Low Birth-weight %, White Birthing People |
|---|---|---|
| 80222 | 6.6% | 6.9% |
| 80921 | 6.0% | 7.5% |
| 80631* | 5.8% | 10.6% |
| 80229 | 5.3% | 11.4% |
| *p<0.05 | | |

**Table 11 - Colorado ZIP Codes Where Black Low Birth- Weight Rates are Less Than White Low Birth-Weight Rate**

## Recommendations: Doula and Community Health Worker Support

Families cannot be expected to be fully emotionally or logistically prepared for the wide range of outcomes that may occur during the perinatal period, including traumatic and catastrophic experiences such as neonatal mortality or severe infant illness. Practicing Doulas and Community Health Workers (CHWs) who support perinatal families should therefore be equipped with resources and training to respond compassionately and effectively across the full spectrum of birth outcomes. They must also have the flexibility and capacity to navigate unexpected or complex situations as they arise.

Comprehensive resource repositories should include culturally responsive and culturally grounded materials related to loss, grief, and bereavement. These should cover mental health supports, options for infant disposition—including low- or no-cost options—and information about processes specific to various birthing locations or healthcare systems for supporting grieving families. Resources should also highlight community-based organizations and peer-led grief networks that reflect the cultural and linguistic identities of the families served.

In addition to supporting families who experience loss, Doulas and CHWs often play a critical role in the postpartum period for families with preterm or low birth-weight infants, including those with babies in the Neonatal Intensive Care Unit (NICU). To provide meaningful support, Doulas and CHWs should be familiar with:

- **NICU systems and policies,** including visitation, parental involvement in care, and discharge planning.
- **Culturally validating resources** for Black and African American families and other communities disproportionately affected by preterm birth, including peer support programs, lactation consultants with cultural concordance, and parent-led advocacy organizations.
- **Mental health and stress management supports** tailored for families experiencing prolonged separation from their infants or uncertainty regarding health outcomes.
- **Training in trauma-informed care,** recognizing the emotional and physical toll of preterm birth, and integrating practices that promote trust, empowerment, and healing.
- **Navigation tools** to help families connect with early intervention services, nutrition and breastfeeding support, and home visiting programs following NICU discharge.

Finally, ongoing professional development and reflective supervision should be made available for Doulas and CHWs themselves. Supporting families through grief, trauma, and medically complex infant care can be emotionally taxing, and sustaining the well-being of the workforce is essential to ensuring high-quality, compassionate care.

# Recommendations: Infant Feeding Support for Preterm and Low Birth-weight Infants

Infant feeding is a cornerstone of care for families with preterm and low birth-weight babies. These infants often require specialized nutritional support and may experience challenges with feeding initiation, coordination, or tolerance. Evidence underscores that early, equitable access to human milk and culturally concordant lactation support improves infant health outcomes and strengthens parental confidence. Doulas and Community Health Workers (CHWs) are uniquely positioned to bridge families to these essential resources during NICU stays and throughout the transition home.

- **Expand access to human milk and milk banks:** Ensure that families of preterm and low birth-weight infants are informed about the benefits of breast milk or donor human milk and have equitable access to milk banks when maternal milk is unavailable or limited. Provide families with clear, culturally appropriate information on eligibility, cost coverage, donation, and referral processes.
- **Invest in culturally concordant lactation support:** Prioritize the recruitment, training, and reimbursement of lactation consultants, peer counselors, and community-based support specialists who share cultural and linguistic backgrounds with the families they serve. This promotes trust, increases breastfeeding duration, and honors diverse cultural practices around infant feeding.
- **Integrate lactation education into postpartum and home visiting programs:** Embed infant feeding education and lactation support into postpartum visits, home visiting programs, and peer support networks to ensure continuous, family-centered care from hospital to home.
- **Provide trauma-informed and accessible lactation care:** Train Doulas and CHWs to recognize and respond to the emotional and physical challenges associated with preterm and NICU experiences. Incorporate trauma-informed approaches that validate parental stress, grief, and resilience.
- **Strengthen systems-level partnerships:** Foster collaboration between hospitals, milk banks, public health agencies, and community-based perinatal programs to coordinate referrals, share best practices, and ensure consistent access to feeding support services.
- **Support parental accommodations and access to equipment:** Advocate for policies and workplace protections that allow parents adequate time and space for milk expression and infant feeding. Ensure families can access hospital-grade pumps, storage supplies, and other necessary equipment at low or no cost.

By integrating equitable, culturally responsive, and system-connected infant feeding supports, programs can improve the health and survival of preterm and low birth-weight infants while empowering families to confidently nourish and care for their babies.

# Recommendations: Using ZIP Code–Level Data to Guide Equitable Outreach and Workforce Recruitment

Advancing perinatal equity and improving birth outcomes requires aligning resources and workforce development with the communities most affected by inequities. Evidence from this report demonstrates that infant mortality, preterm birth, and low birth-weight rates vary sharply by ZIP code, reflecting deeply rooted structural and social inequities. Using this geographic lens enables programs to act with precision and accountability, ensuring that supports reach the families and neighborhoods where the need is greatest.

- **Prioritize outreach in high-impact areas:** Use ZIP code–level birth outcome data to identify neighborhoods with the highest rates of infant mortality, preterm birth, and low birth-weight, and prioritize these areas for program outreach, home visiting, and community-based supports.
- **Recruit and train within communities most affected:** Develop workforce pipelines that actively recruit, train, and employ Doulas, community health workers, and lactation professionals from the ZIP codes and cultural communities experiencing the greatest burden of inequities. Community-rooted professionals bring essential lived experience, cultural knowledge, and trust to the work.
- **Locate services strategically:** Establish Doula collectives, lactation support hubs, and perinatal navigation services in or near neighborhoods with the poorest outcomes to ensure accessibility and continuity of care.
- **Leverage data for accountability and evaluation:** Regularly analyze and map ZIP code–level birth outcomes to assess progress over time and evaluate whether outreach and workforce investments are effectively reducing geographic disparities.

Grounding program design and workforce investment in ZIP code–level evidence ensures that perinatal equity strategies are data-driven, community-informed, and positioned to create the greatest impact for families most at risk.

## Recommendations: Strengthening Workforce Pipelines for Culturally Diverse Doulas and Lactation Professionals

Advancing birth equity depends on a perinatal workforce that reflects the cultural, linguistic, and lived experiences of the families it serves. Evidence from this report underscores that financial barriers, limited access to mentorship, and lack of institutional support hinder the entry and advancement of Doulas and lactation professionals from historically excluded communities. Building sustainable, culturally grounded workforce pipelines requires intentional investment, equity-centered training, and recognition of community-based expertise as essential to improving maternal and infant health outcomes.

- **Provide financial support for training and certification:** Expand scholarships, stipends, and reimbursement for training and certification costs for aspiring Doulas and lactation professionals from under-represented communities. Include funding for paid practicum placements to eliminate the burden of unpaid certification hours.
- **Develop mentorship and apprenticeship models:** Create structured mentorship programs that pair trainees with experienced, culturally concordant professionals. These relationships strengthen clinical skills, build confidence, and support long-term retention in the field.
- **Integrate community partnerships into training pathways:** Collaborate with community-based organizations and local training programs to establish culturally responsive education pipelines that are rooted in the communities they serve.
- **Establish sustainable funding and reimbursement mechanisms:** Advocate for Medicaid and other payer systems to reimburse doula and lactation services equitably, recognizing these roles as essential members of the perinatal care team.
- **Invest in workforce well-being and supervision:** Provide reflective supervision, peer support, and professional development opportunities to prevent burnout and ensure that Doulas and lactation professionals are supported in their emotionally demanding roles.

By removing financial and structural barriers, fostering mentorship, and embedding equity into workforce policy, states and local health systems can cultivate a diverse and sustainable perinatal workforce — one that is trusted by families, grounded in community, and equipped to improve birth outcomes across populations.

# Conclusion

This report highlights an urgent reality: despite strong community assets, committed providers, and growing local initiatives, significant inequities in maternal and infant health persist across Colorado. Black birthing people and their infants continue to face disproportionately high rates of preterm birth, low birth weight, infant mortality, severe maternal morbidity, and pregnancy-related mortality - even when prenatal care engagement matches or exceeds that of white birthing people. Evidence suggests that these patterns reflect the cumulative effects of structural racism, unequal access to high-quality care, and broader social and economic conditions that shape health well before pregnancy.

Population shifts between 2020 and 2024 emphasize the need for localized planning as Black birthing families move from long-standing urban hubs into suburban and regional communities. ZIP-code–level data show concentrated areas of growth and decline that state-wide averages conceal. To ensure equitable access to culturally responsive and respectful care, perinatal systems must adapt by investing in emerging population centers, strengthening community partnerships, and intentionally designing services that reflect the needs and preferences of birthing individuals. Data on severe maternal morbidity and maternal mortality further demonstrate that preventable harm remains common, underscoring the need for holistic, person-centered care and stronger coordination across medical, behavioral health, and social service systems.

Collectively, these findings call for sustained action and structural change. Improving maternal and infant health outcomes will require cross-sector collaboration, accountability to communities most affected by inequities, and investment in community-rooted solutions. Expanding the perinatal workforce - including Doulas, midwives, and birth workers of Color - and ensuring care that is safe, dignified, and high-quality are essential steps toward achieving equity. By centering Black birthing liberty and justice, Colorado has an opportunity to build a perinatal health system in which every pregnancy is supported, every birth is respected, and every family and baby can thrive.

Appendix Documents

For all press or media inquiries, please contact Shawn Taylor at Shawn@familiesforwardrc.org.

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Contributing Authors:
Lynn VanderWielen, PhD, MPH, Senam Ametsitsi, MD, Cornelia Antwi, MD, MPH, Natalia Hernandez-Morfin, MD, MPH, LaKia Thomas, MPH, Von Bright, Alliss Hardy, Shawn Taylor

# Families Forward Resource Center


(303) 307-0718

www.familiesforwardrc.org

lynn@familiesforwardrc.org