Maternal and Infant Mortality and Morbidity in Monroe County, New York: A Review

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Background

- Globally, the United States ranks poorly for maternal health outcomes, with rates of maternal and infant mortality on the rise. Maternal deaths have been increasing since 2000, resulting in the highest maternal mortality rate among developed countries (The Commonwealth Fund, 2020).
 There are racial and ethnic disparities present too, as maternal and infant mortality rates are higher for women of color and their babies than White women.
- We started this report with the aim of gaining a deeper understanding of the factors influencing the maternal health crisis that is happening nationwide and disproportionately affecting women of certain racial and ethnic backgrounds.
- Initially, we focused our research on the legislative aspect of the current maternal health crisis by familiarizing ourselves with the MOMNIBUS Act of 2021 before realizing that we needed to focus on a local approach in order to understand the crisis.
- After shifting from a national to a local city based perspective, we realized that the crisis is having an acute impact within certain areas of Rochester and began conducting interviews with local organizations dedicated to improving maternal health.

Black Maternal & Infant Health Crisis

Data Infographic

Monroe County, New York.
Research has revealed alarming numbers and disparities in health in Black women from the

Mortality

Maternal death has increased from 13.2 per 100,000 live births in 2006 to 29.7 per 100,000 live births in 2019

(New York State Prevention Agenda Dashboard County Level: Monroe County, 2022)



Rates

Maternal mortality is ~25% higher than national average

Maternal mortality is ~54% higher than State average

(National Center for Health Statistics, 2022; New York State Prevention Agenda Dashboard County Level: Monroe County, 2022)

Morbidity

Morbidity is 50% higher in Black women than White women

(Common Ground Health, 2021, p34)



Infant Mortality

There are 7.1 infant deaths per 1,000 live births. Black infants 3x more likely

to die than White infants
(New York State Prevention Agenda Dashboard County Level: Monro



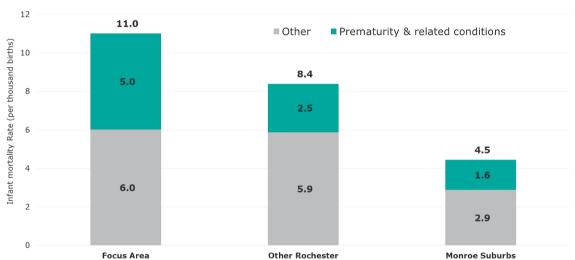
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New York State Prevention Agenda Dashboard County Level: Monroe County. (2022; February). Promote healthy women, infants, and children. New York State

The chart below shows that prematurity is a major driver of the overall disparity in infant mortality. The significantly higher infant mortality rate in the Focus Area* compared to the rest of Rochester is explained entirely by prematurity and related conditions – there is no significant difference in the mortality rate for other causes. In the suburbs compared to the city, the infant mortality rate due to prematurity is even lower, as is the rate for other causes..

Infant mortality rates due to prematurity vs other causes Monroe County (2013-2015)

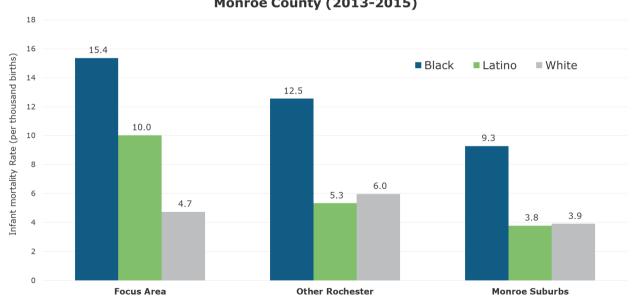


Source: NYSDOH Vital Records; Analysis by the Monroe County Department of Public Health and Common Ground Health Focus Area ZIPs: 14605 14608 14611 14613 14621



* The Focus Area is a large section of Rochester with particularly high concentrations of blacks, Latinos, and also poverty Consistent with the region overall, Monroe County has a large infant mortality disparity for African-Americans. The African-American infant mortality rates are by far the highest in each geographic area. And although the African-American rate is lower in the suburbs than the city, their suburban rate is still nearly double the white rate in the Focus Area*, which includes some of the most vulnerable neighborhoods in the city. Within the Focus Area, the Latino infant mortality rate is double the white rate, but elsewhere in the city and in the suburbs there is no significant difference.

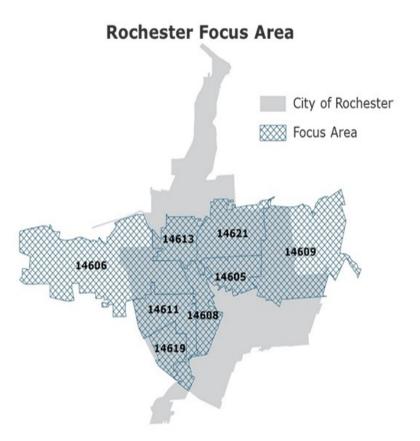




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A Focus Area of eight contiguous ZIP codes across the city of Rochester was identified by the African-American Health Coalition as needing special attention. This area was selected due to the high concentration of African-Americans in particular and people of color in general. Within the Focus Area, non-Latino whites comprise only 29 percent of the population, compared to 85 percent in the balance of the county.





"When it comes to Black maternal and newborn health, Rochester is program rich but results poor." Dr. Twyla Dillion Executive Director - HealthConnect One

New York State Maternal Mortality Review Board - Board Member

HealthConnect One is the national leader in advancing equitable community-based peer to peer support for pregnancy, birth, breastfeeding, and early parenting

Previous positions include: Rochester Healthy Baby Network - Black Maternal Mortality Project Lead, Rochester United Way, & Finger Lakes

Performing Provider System

Summary of Maternal Health Services Available in Monroe County

Medical Center	CenteringPregnancy Program	Midwifery	Adolescent Maternity Program	Other Programs
URMC Strong Beginnings	√	√	✓	MotherToBaby Bloom Pregnancy Care Online classes: Childbirth series; Breastfeeding; Understanding your birth/newborn
Rochester Regional Health	√	√		Online classes: Childbirth series; Breastfeeding
Anthony L. Jordan Health Center – FQHC	√	√		Adolescent family planning; refugee health
Healthy Baby Network (HBN)			✓	Provides comprehensive services for birthing parents both mother <u>AND</u> father. Home visitation throughout pregnancy and continue to visit until baby is 2-years old. Black Doula collaborative, oral health, community action network (CAN), PeerPlace network (health IT resource),
Nurse Family Partnership – Monroe County Health Department			✓	Specially trained nurses will visit in your home throughout your pregnancy and continue to visit until your baby is 2-years old. Must enroll prior to 28th week; there is no charge. Must meet income requirements to enroll.
Health Family New York – NYS program administered by Society for the Prevention of Cruelty to Children (SPCC)			·	Specially trained nurses will visit in your home throughout your pregnancy and continue to visit until your baby starts school or Head Start. There is no charge.

Nurse-Family Partnership

- Premise: provides home nurse visits to people pregnant with their first child up through the child's second birthday
- Foundation: NFP is an evidence based program and is grounded in the results of randomized clinical trials
- Core Principles: foundation, attachment, and self-efficacy are the three core principles upon which NFP operates and support the organizations client centered focus
- Representation: the organization is focused on helping low income populations and women of color, and carefully pairs nurses with mothers who they believe will be a good fit together

Common Ground Health



Organization Goals	Work in Maternal/Child Health	Programs and/or Initiatives
 Data planning and organization to support initiatives Leverage stakeholders Collaborate with the community to create lasting solutions 	 Research maternal infant mortality and morbidity rates Workforce development for maternal health professions Advocating for Doula representation and liveable wages 	 Black Doula Collaborative "The Color of Health" - Racism as a Public Health Crisis African American Coalition collaboration Health Equity Pathway

"Racism is a public health crisis."

Dr. Linda Clark - Chief Medical

Officer (CGH, 2021b)

Healthy Baby Network

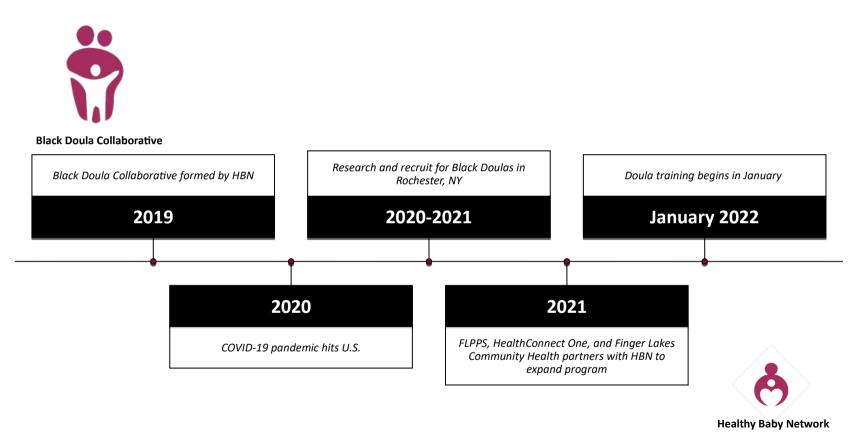


Organization Goals	Work in Maternal/Child Health field	Programs and/or Initiatives
Provide care, resources, and education to mothers, fathers, infants, and their families	 Outreach in community to refer to services Community Health Workers Education Case Management Home visitations 	 Black Doula Collaborative Fatherhood Program Motherhood Program Healthy Start Program Oral Health Advisory Committee Community Action Network

Black Doula Collaborative

- Community-Based Doula program
- Address racial disparities among Black birthing people, lack of representation among Black doulas and costs to obtain a doula
- Free Doula training

- Home visitations from pregnancy to postpartum
- Individualized birth plans
- Breastfeeding support
- Referrals to other resources



A Tale of 2 Cities: Rochester, NY (Monroe County) and Buffalo, NY (Erie County)

Buffalo, New York - Benchmarking

	Rochester	Buffalo
Infant Mortality per 1000	7.1	5.1
Maternal Mortality per 100,000	29.7	13.6
Pre-term births %	10.4%	10.1%
Births per year	7883(Total) 1665(Black)	9,843(Total) 1,858(Black)

- What data are we still missing?
 - Miscarriages, post-partum depression, # of women who worked with a Doula

Rochester v. Buffalo - Programs

- Buffalo Prenatal-Perinatal Network
 - 2018 Served 489 families
- Healthy Baby Network
 - 2018 Served 481 families

- Birthing Center of Buffalo
 - "Are you a healthy person with a low-risk pregnancy?"

- Challenges to birthing centers:
 - What population are they missing?
 - o Prenatal Care

The federally funded *Strong Start* study showed patients receiving maternity care in a birth center, matched with a group of women with similar risk factors receiving routine prenatal care, had lower rates of preterm birth, low birthweight, and C-section deliveries.

Reductions in health care utilization, likely contributed to reduced expenditures (savings > \$2000 per person) (CMS, 2022)

Maternal and Infant Health Programs Around the Country

Healthy Start: pre- and postnatal care – home visits, breastfeeding classes, fatherhood support

The Center for Reproductive Health: conducts research to improve survival of all women, especially minority and underserved women and offspring

Alabama (Birmingham)

Kentucky (Louisville)

Black Birth Justice: doula training Healthy Babies Louisville: Dept of Health and CBO create strategies to improve wellness **Black Wellness and Prosperity**

Center: doula training, primary goal to provide Moms with advocates

Fresno County/USF Preterm Birth Initiative: moms and community lead support groups to empower expectant mothers and connects them to resources

California (Fresno)

Utah

Pregnancy Risk Assessment
Monitoring System (PRAMS): collects
data and provides details on where to
target interventions

Baby Your Baby: covers outpatient services for low-income Moms

MotherToBe: Free information help line to text or call a health professional

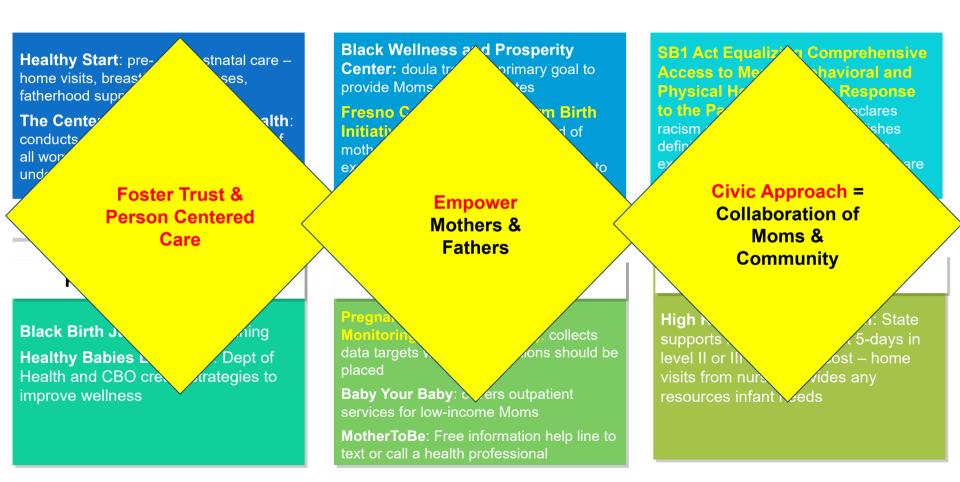
SB1 Act Equalizing Comprehensive Access to Mental, Behavioral and Physical Health Care in Response to the Pandemic (2021): declares racism a health crisis and establishes definition for Doulas in State statute expanding patient access to receive care from them

Connecticut

Arizona

High Risk Prenatal Program: State supports infants who spent 5-days in level II or III care at no cost – home visits from nurse, provides any resources infant needs

Maternal and Infant Health Programs Around the Country





Social Determinants for Moms Act



Protecting Moms Who Served Act (Approved)



Kira Johnson Act



Data to Save Moms Act



Perinatal Workforce Act



Protecting Moms and Babies Against Climate Change Act

Momnibus Act

Comprehensive – beyond addressing maternal death to advance maternal health equity, achieve maternal health justice for Black women, Hispanic women, and Native Americans, and ensure infant health in communities (March of Dimes, 2021).



Moms Matter Act



Justice for Incarcerated Moms Act



Tech to Save Moms Act



IMPACT to Save Moms Act



Maternal Health Pandemic Response Act



Maternal Vaccination Act

NYS Legislation

"New York's Midwifery Birth Center Bill" NYS S.1414A/A.259 (Approved 12/21)

Removes requirement of physician oversight, abbreviates the certificate of need (CON) process. *Too early to assess impact.*

"Maternal Mental Health Package" (under review)

Senate Bill 7752: review and provide recommendations for the diagnosis and treatment of perinatal and postpartum mood and anxiety disorders

Senate Bill 7753: review screening tools and identify inequalities within protocols provide recommendations to address

Senate Bill 7865: healthcare providers contact mother's who gave birth within 21 days of delivery to detect maternal depression earlier as well have mothers complete a questionnaire during pre and postnatal care periods.

Results of our Research - Accessibility

- Based on our interviews, it is evident that Rochester has an abundance of organizations dedicated to improving maternal health outcomes, but continues to suffer from high rates of maternal mortality, especially among racial lines
- From this research, we've determined that accessibility is a key component to improving the results produced by local maternal health organizations
- Ensuring that people have the means to come to meetings and appointments and implementing accessible meeting times for working people is essential to producing better maternal health outcomes

Results of our Research - Mental Health & Community Support

- Community support from local organizations is a critical component to supporting mothers and babies during pregnancy and in the postpartum period as well
- Based on the interviews we carried out with local organizations, it is evident that COVID-19 has taken a toll on the community being served, and that access to mental health resources are more important than ever
- Our research demonstrates that gaining the trust of populations being served is also essential to addressing the maternal health crisis, and that providing community support depends on the ability to foster a sense of trust

Results of our Research - Representation

- Representation is key: In order to harness the resources and full potential of these groups to address the current maternal health crisis in an impactful manner, these groups should focus on employing community members that will be more likely to relate to program participants and engage in positive interactions with expectant mothers and families
- Building on representation, the Black Doula Collaborative mentioned previously is an example of building representation within these organizations dedicated to improving maternal health, as the premise is to employ Black doulas specifically to provide support and advocacy for Black mothers
- Need for representation is a complex issue that will require further evaluation to develop

Intervention Opportunities....

- Maternal Health State surveillance utilize NYS Prevention Agenda with a Health Equity Framework like Utah to inform focus (ie, similar to PRAMS)
- Study and Documentation of Maternal Mental Health
- Long Term Study of At Risk Moms, compare different interventions, follow mothers and infants for 2-3 years after birth to gain better understanding of what may be causing "Results Poor" outcomes in Monroe County.
- Civic Approach: Monroe County &
 Organization to ensure women are
 connected with the services needed (ie,
 USF/Fresno or Healthy Babies Louisville)

- Referral Service between women at risk and vulnerable populations and the programs which have capacity - working with Primary Care, Urgent Care, Ob/Gyn
- Empower Mothers and Fathers: Training, Group Leaders, Doulas, Mentors, places to connect and enjoy community with other birthing people
- Increase Representation
 - Collaboration between Colleges and Rochester School System "Network for the Future"
 - Supporting Doulas who may want to obtain clinical positions...

Thank You

Questions?

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Additional Slides

NYS: Doula Pilot Program

NYSDOH pilot Medicaid program consisting of 2 phases

Reimburse Doulas for up to 4 prenatal visits, support during labor and delivery, and up to 4 postpartum visits

Phase 1: Launched 3/2019 in Erie County Center - in process

Phase 2: Will launch in Kings County (Brooklyn) when provider capacity reached

