



The Mom and Baby Action Network National Equity Framework Guide

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The contents of this guide are not a reflection of the endorsement of any single participating organization, but rather a collection of strategies, solutions, resources, and metrics identified by a collective of partners in the maternal and infant health equity field and beyond.



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Introduction

The Mom and Baby Action Network (aka M-BAN) is a national, action-oriented coalition of cross-sector partners who invest in, influence, and leverage collective action to lead broad, aligned changes in policy, research, funding, and systems to address the root causes of inequities in maternal and infant health. It evolved over time from its predecessor, the National Prematurity Collaborative, which was established in 2016 with a singular focus on mobilizing partners in the fight against preterm birth.

Finding the pathway to maternal and infant health equity has required M-BAN and partners to start by learning and understanding the key challenges facing communities most impacted by systems rooted in racism, classism, and gender oppression. Advancing equitable outcomes in maternal and infant health requires radical collaboration and shared vision among cross-sector stakeholders. Likewise, the development of the National Equity Framework (NEF) was accomplished through shared visioning and collaboration.

Using Results-Based Accountability™, over 600 organizational partners, subject matter experts, and community members reviewed data, gathered insights into the “story behind the data,” and developed a shared framework to guide collective efforts for years to come, as we aim to “achieve together, what we cannot achieve alone,” and tackle the complex issues driving inequities for parents, babies, and families across the country.

With the evolution of M-BAN in November 2020, partners developed consensus around a shared results statement: “All people are healthy before, during, and after pregnancy—and if they give birth, they have healthy outcomes.” With this shared vision, it became clear that the group had to expand its lens and scope, going beyond prematurity prevention to include both infant and maternal health with an explicit focus on equity.

M-BAN aims to achieve maternal and infant health equity by centering the voices and lived experience of



NEF Guide layout

STRATEGY

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- *Data and research snapshot*
- *Solutions overview*
- *Additional resources*
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local communities and mobilizing partners, companies, organizations, subject matter experts, policy makers, philanthropists, advocates, and leaders nationally around a common agenda and shared metrics of success.

This is being accomplished by:

- Building on the [Guiding Principles](#) and the [Birth Equity Consensus Statement](#) developed by members of the National Prematurity Collaborative.
- Convening national strategy workgroups and engaging local place-based coalitions to facilitate the removal of system barriers, mobilize the alignment of resources, amplify awareness of best practices, and increase access to expertise.

- Facilitating a disciplined result-based approach to our collective work through the regular monitoring and sharing of common metrics of success, both at the populations and performance measure levels.
- Accelerating the implementation of policy, research, systems, funding, and programmatic solutions to advance the five strategies identified in the National Equity Framework:
 - Dismantle racism and address unequal treatment
 - Increase access to high-quality, high-value, risk-appropriate, integrated healthcare
 - Promote environmental justice to limit exposure to environmental threats
 - Advance economic opportunity
 - Build safe, supportive, and connected communities

The National Equity Framework Guide (guide) was prepared in collaboration with M-BAN partners and subject matter experts who are working to implement and support solutions contained in the NEF and taking part in mutually reinforcing activities dedicated to advancing the five strategies of the NEF. The guide features examples of aligned emerging and promising programs, policies, partnerships, and best practices led by organizations at the national, state, and local levels, to reduce racial disparities and achieve greater equity in birth outcomes. Each chapter of the guide features examples of how the NEF strategies and solutions are being implemented across the country, along with additional resources partners can consult to identify relevant data sources and indicators to measure and monitor success.

In collaboration with the Association of Maternal and Child Health Programs (AMCHP), M-BAN will continue to grow the body of implementation knowledge aligned with the strategies in the NEF. Strategies will be integrated into the [AMCHP Innovation Hub](#) and examples of strategies in action will be regularly updated and added for partners to access and reference. Additionally, we'll continue to spotlight examples of relevant aligned efforts in upcoming M-BAN learning opportunities, communications, and conferences to further equip our partners with tangible references for how we can collectively translate the NEF into action.

We encourage you to contact us at ActionNetwork@marchofdimes.org if you'd like to share the work that you and/or your organization are doing to advance one or more of the strategies contained in the National Equity Framework.

Join us!

Get involved by joining the Mom and Baby Action Network to collectively advance environmental justice and equitable maternal and infant health outcomes.



Developing and implementing the National Equity Framework

As M-BAN collectively seeks to build and strengthen a national movement aimed at achieving equity in maternal and infant health outcomes, we've received an increasing number of requests for more resources, tools, and insights about how partners can mobilize and advance strategies and solutions aligned with the NEF. This guide is designed to serve as a resource for cross-sector partners committed to addressing the root causes of inequities impacting moms, babies, and their families.

As individual organizations, we've done a lot over the years to build strong safety nets and community programs that mitigate the ill effects of inequitable systems and provide for the immediate needs of families in crisis. Together, we can tackle complex and multi-layered issues such as racism and discrimination, exposure to environmental threats, deep lifelong economic insecurity, social isolation, and fragmented healthcare systems. Together, we can join forces to thoughtfully and powerfully align our resources, efforts, and influence to dismantle inequitable systems, strengthen existing programs, and advance the implementation of equitable and best practices that invest in creating the optimal conditions in which families can be born, grow, and thrive.

To achieve equity and make long-lasting improvements in preterm birth, maternal health, and infant wellbeing, we must work collaboratively to accelerate the use of evidence-based, emerging, and promising interventions, address social determinants of health through policy and systems change, advance meaningful research, and harness collective action and partnerships to drive measurable results.

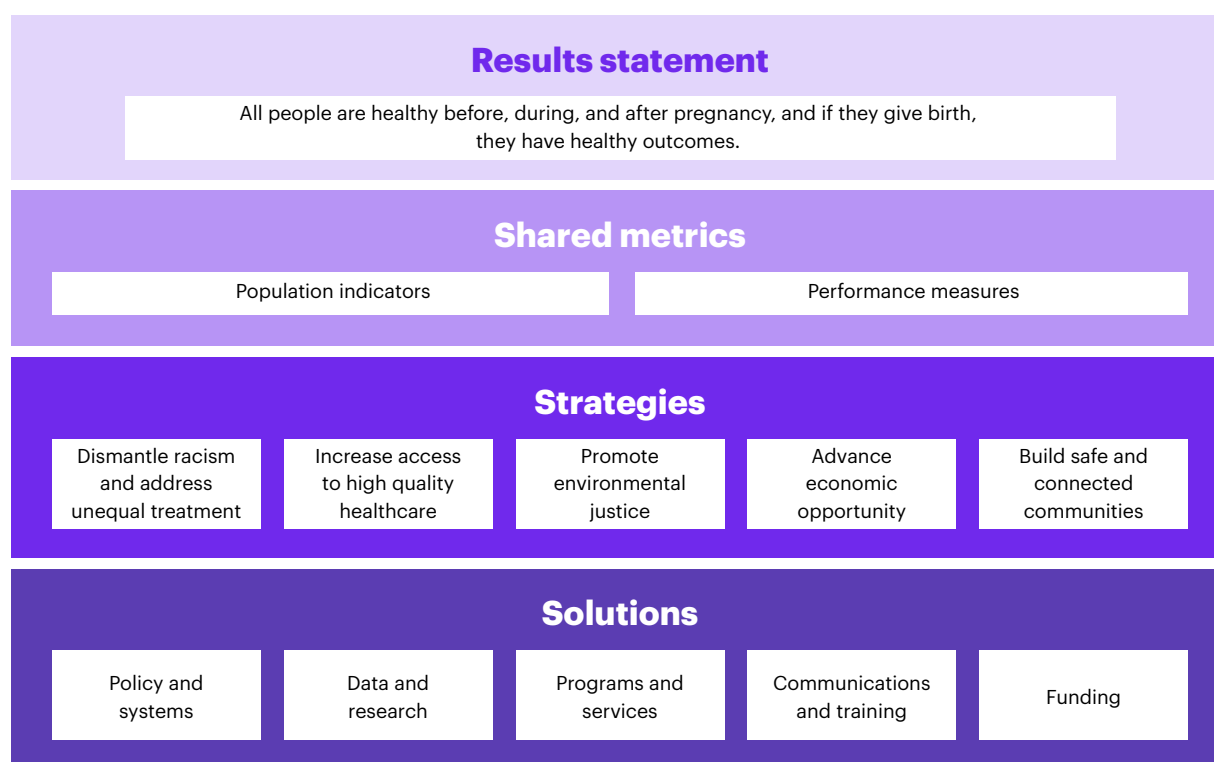
In partnership with approximately 600 organizational partners, subject matter experts, and community members, and using Results-Based Accountability™ (RBA), M-BAN developed the NEF to accelerate birth equity for moms, babies, and their families. The NEF was co-created through a highly engaged process that included surveys, facilitated data-driven discussions,

and community listening sessions. Quantitative and qualitative data from this process was analyzed to identify the root-causes driving inequitable health outcomes for moms and babies. The resulting framework gives M-BAN members and partners a shared vision and guide for advancing maternal and infant health equity.

The NEF is anchored by an agreed upon Results Statement "All people are healthy before, during, and after pregnancy, and if they give birth, they have healthy outcomes."



Mom and Baby Action Network's National Equity Framework



The framework includes a set of shared metrics including:

Population Indicators stratified by race and ethnicity: Measures of whole populations at the community, city, county, state, and national level.

	Suggested indicators	Suggested data sources
Infant health	Infant mortality rate	<ol style="list-style-type: none"> Centers for Disease Control and Prevention, Reproductive Health, Data and Statistics <ul style="list-style-type: none"> Includes links to Pregnancy Mortality Surveillance, National Center for Health Statistics, National Vital Statistics, and more. March of Dimes Peristats™ <ul style="list-style-type: none"> Aggregated data from nine government agencies and organizations. Data includes preterm birth, infant mortality, Cesarean births, and more. National Committee for Quality Assurance, HEDIS Measures and Technical Resources: Pre-natal Depression Screening and Follow-up (PND)
	Preterm birth rate	
	Low birthweight rate	
Maternal health	Maternal mortality rate	
	Maternal near miss rate	
	Hypertensive disorders of pregnancy—hypertension, preeclampsia	
	Gestational diabetes	
	Maternal depression screening (%)	
	Delivery method (Cesarean birth rate)	

Performance measures: Measures that focus on whether individuals are better off and how well a program, agency, or service system is working, quantified through three questions:

- How much did we do?
 - Refers to the number of solutions, activities, programs, and people served.
- How well did we do it?
 - A measure of the percentage of solutions, activities, and programs that performed well.
- Is anyone better off or has anything improved?
 - A measure of quantity and quality of effect on individuals' lives including #/% with improvement in skills, attitudes, behavior, and circumstances.

The framework outlines the five root-cause strategies identified using RBA and the types of solutions M-BAN and others will advance to achieve the shared results statement.

The goals of this framework are to **accelerate the implementation** of policies, research, systems, funding, and programmatic solutions powered by intentional alignment and thoughtful synergy across partners and sectors, to **dislodge persistent system barriers**, and **fuel transformative change** beyond the occasional small pockets of excellence. M-BAN members and partner organizations come together in this shared vision because too many families are suffering and perishing unnecessarily across our nation and because, while difficult and overwhelming, these complex root causes of inequities are too important to not tackle.

[Join the Mom and Baby Action Network](#), so that together, we may advance the five overarching strategies identified in the National Equity Framework:

- Dismantle racism and address unequal treatment
- Increase access to high-quality, high-value, risk-appropriate, integrated healthcare
- Promote environmental justice to limit exposure to environmental threats
- Advance economic opportunity
- Build safe, supportive, and connected communities

The importance of advancing equity in maternal and infant health

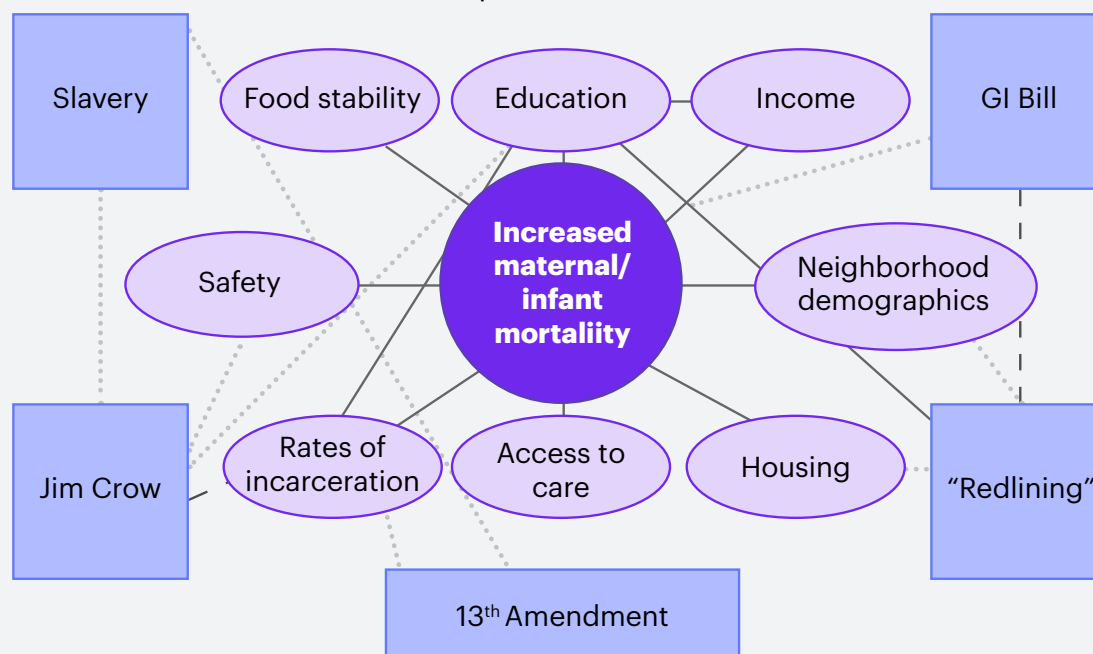
In 2020, the Birth Equity Consensus was created to guide the work of March of Dimes' Prematurity Collaborative and the broader MCH community in "equity-based research, practice, and policy advocacy" at every level—from community to national work. (Fleda Mask Jackson, 2020) It was clear that to achieve equity, one must first define its meaning. The consensus considered several definitions, including one previously published by Braveman et al. in 2018, which stated that equity is a human right built upon the belief that all individuals are of equal worth and should be afforded respect, dignity, justice, and fairness. When applied to health, health equity means that all human beings must have every opportunity that is fair and just to achieve optimal health. (Braveman P, 2018) Additionally, according to the National Birth Equity Collaborative, birth equity is "the assurance of the conditions of optimal births for all people with a willingness to address racial and social inequalities in a sustained effort." (National Birth Equity Collaborative (NBEC), 2023)

Equity requires doing things differently to realize different results. In addition to ensuring that people have equitable access to high quality healthcare, it's also important that we seek to understand and improve social and structural factors that influence birth outcomes, and that we implement policies to make a true and measurable impact on the social, economic, and political conditions that influence the health and wellbeing of individuals and families. (Crear-Perry, 2002)

Restoring Our Own Through Transformation (ROOTT)'s theoretical framework, the Web of Causation, depicts the relationship between structural and social determinants of health and demonstrates how systemic and structural racism is at the root of what shapes and drives the distribution of social determinants. The interconnected pathways lead to increased inequities in maternal and infant mortality as depicted in the following image. ROOTT Web of Causation Diagram (Restoring Our Own Through Transformation, 2023)

Web of causation

Structural and social determinants:
Impact on health



ROOTT Web of Causation Diagram (Restoring Our Own Through Transformation, 2023)

Strengthening equitable maternal and infant health outcomes remains a challenge in the United States (US). Despite continued advancements in medical care, rates of preterm birth and maternal mortality and morbidity have been rising in the US, and inequities have continued to deepen and persist.

The Centers for Disease Control and Prevention (CDC) reported via the National Center for Vital Statistics that in 2021, the maternal mortality rate was 32.9 deaths per 100,000 live births. This was an increase compared to the rate of 23.8 in 2020 and 20.1 in 2019. For non-Hispanic Black women, this rate increased to 69.9 deaths per 100,000 live births. American Indian/Alaska Native pregnant people die at two times the rate of White pregnant people. (Hoyert, 2023)

In addition to maternal deaths, approximately 50,000 women in the US each year experience life-threatening pregnancy related complications such as blood transfusion, hysterectomy, ventilation, complications of eclampsia, and infections (Kilpatrick, 2016). Pregnancy-induced hypertensive disorders and gestational

"Treating different things the same can generate as much inequality as treating the same things differently."

Kimberlé Crenshaw

diabetes may resolve when pregnancy ends but can also increase a woman's risk of developing type 2 diabetes and other hypertensive disorders later in life, making pregnancy an important and insightful window into a woman's future health status and needs.

Pregnancy-related complications are also closely tied to infant deaths (death prior to the first birthday). Approximately two-thirds of infant deaths occur during the first month after birth, often from complications of congenital abnormalities and/or preterm birth (birth before 37 weeks of completed pregnancy). Preterm birth is also associated with childhood disease and disability, and higher risk of developing adult-onset chronic disease.

In the US, two babies die every hour, and two women die from pregnancy complications every day. Preterm birth is a leading cause of infant mortality and a significant contributor to racial disparities in infant mortality. Disparities in preterm birth have increased over the past several years in the US, and Black children experience infant mortality at a higher rate than any racial or ethnic group.

While there is no single cause to the maternal and infant health crisis, contributing factors include maternal health and management of preexisting conditions. Systemic challenges with healthcare systems, biased care, and deeply entrenched structural racism are exacerbating the health equity gap. The psychological impacts of racism put Black and Native women and pregnant people at a higher risk of medical conditions such as preeclampsia, eclampsia, embolisms, and mental health conditions.

Helping all moms be as healthy as they can be, before, during, and after pregnancy and helping babies stay in the womb as close to full-term gestation as possible are two of the most impactful steps to ensure that all families have a healthy start and opportunity to achieve health equity. But health equity cannot be reached without meaningfully addressing equity, which, as described earlier, is a human right built upon the belief that all people are of equal worth and should be afforded respect, dignity, justice, and fairness.

Exposure to racism in its many forms, not race, is the primary upstream risk factor for racial disparities in adverse birth outcomes. Racism has deep influences on shaping and maintaining systems that drive socio-economic inequities impacting people and communities. Variables such as education level, access to quality healthcare, insurance status, poverty and wealth inequalities, experiences of interpersonal racism and discrimination, and the disproportionate presence of preexisting chronic health conditions that are often associated with heightened and sustained levels of stress, impact the likelihood of pregnancy-related complications. Understanding that BIPOC women and pregnant people have persistently experienced higher rates of exposure to racism, classism, and gender oppression, it's incumbent on partners working to transform the system to do so in ways that prioritize

improvements for communities most impacted. M-BAN was established to mobilize partners from diverse sectors, because achieving equity goes beyond focusing on healthcare and public health actions and partners—it requires the aligned contributions, leadership, and influence of partners in sectors such as housing, community development, transportation, banking and finance, legal services, food and nutrition, education, law enforcement, social services, philanthropy, civic engagement, government, and more. Together, we can rebuild a just society, where moms, babies, and families are not only surviving, but thriving.

Together, we can achieve what we cannot achieve alone.



Strategy: Dismantle racism and address unequal treatment



Strategy overview

The maternal and infant health crisis in the US requires solutions that include acknowledging and dismantling racism in all of its forms, as well as addressing the unequal treatment of women and pregnant people experiencing discrimination based on other aspects of their intersectional identities. This strategy is overarching across all strategies in the NEF—however, it deserves its own focus and deliberate action to move the needle on maternal and infant health equity.

Race has been defined as a social construct and having no biological or anthropological basis and is recognized by the American Medical Association (AMA) as such. (American Medical Association, 2020) Designed as a human classification system, race was invented to define physical differences between people, however, it has been used as an instrument for power, violence, and oppression. The concept of race is inextricable from racism. Racism is the prejudicial treatment of others based on their racial or ethnic group and is expressed in three distinct levels: structural/institutional, interpersonal, or internalized. (Braveman, 2017) Exposure to structural racism, regardless of the extent, has been associated with adverse birth outcomes. (Wallace, 2015) Historically biased and unfair policies and practices have resulted in present day structures, systems, and institutional practices that contribute to and magnify racial differences in access to resources, social conditions, and opportunities. (Braveman, 2017) As a result, racism has had a historical and continued impact on systems of labor, housing, education, voting, justice, and healthcare. These social conditions are inextricably linked to one's health and are often referred to as social and structural drivers of health (SDOH).

Many of the health disparities disproportionately affecting Black and American Indian/Alaskan Native communities are linked to a long history of discriminatory and dehumanizing laws, policies, and practices that have created pervasive inequities in many aspects of life. These laws and policies have been



built into the structures of our society and have formed the foundation for what is known as “systemic racism.” Systemic racism is embedded in long-established systems, and often assumed to reflect the natural, inevitable order of things. However, transforming systems that were created upon oppressive laws and practices isn't just possible and necessary, but it also involves the deliberate reflection and acknowledgement that these atrocities have occurred.

Likewise, unequal treatment perpetrated against people based on non-race-based biases and stigmas also contributes to health inequities and poor outcomes for both the infant and pregnant person. (Wallace, 2015) Other biases and stigmas based on a person's education, poverty level, disability, and even health status (i.e. weight and other co-morbidities) can play a role in timing and access to healthcare during pregnancy. Past healthcare experiences perceived as negative can be a barrier for pregnant people to access early or any prenatal care, as well as key follow-up care postpartum. Additionally, patients with low literacy

have a harder time accessing the healthcare system, understanding recommendations, and following provider instructions. Whether implicit or explicit, interpersonal racism that occurs in the healthcare setting amplifies the impacts of structural racism.

“As a nation, we’ve made strides to eradicate racism, but we need to acknowledge that racism is embedded in the policies that shaped our country, from healthcare to housing to access to needed resources. Policies don’t happen in a bubble; they have a ripple effect across institutions and individuals, and even though laws have changed, those ripples remain today.”

Kenn Harris, NICHQ

Research and data snapshot

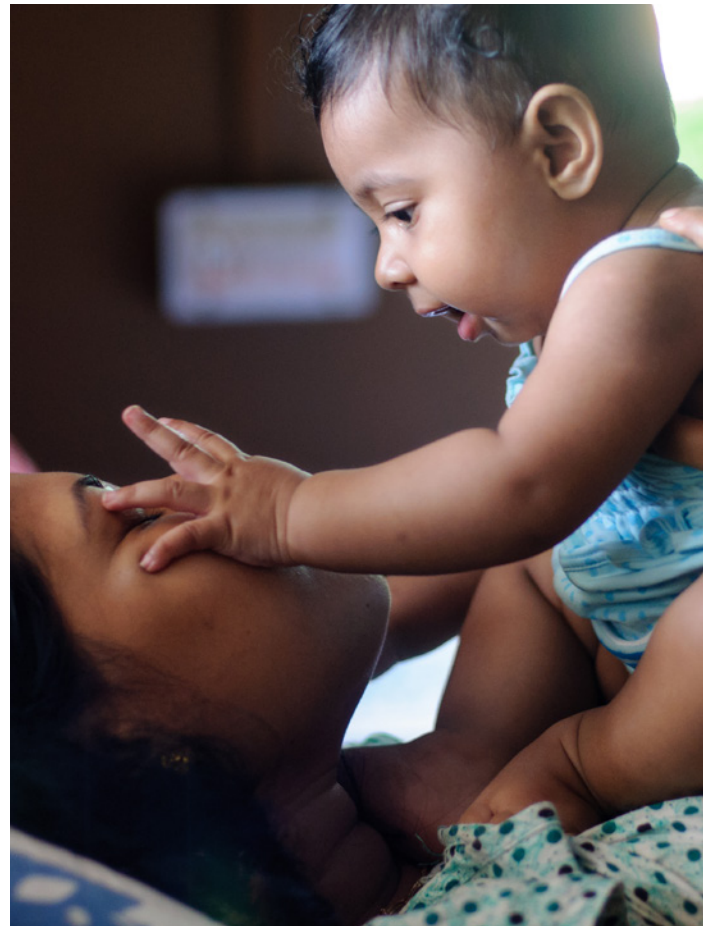
To dismantle the systems embedded in racism, we must first acknowledge the historical legacy and impact of racism. For 246 years, the caste system served as a way of justifying slavery and “othering” Africans who were captured and brought to the US during the Middle Passage. Within this system, White people are seen as most valuable and Black people as least valuable. After slavery was abolished, the opportunity imbalance was sustained by the rise of white supremacy groups and the terrorization of people of color, especially African Americans.

This long history of the advantage-disadvantage opportunity imbalance based on race is the primary reason for racial disparities that exist in the US still today.

For nearly 250 years, slavery in the US was supported by laws; this was followed by nearly 100 years of Jim Crow laws put in place to dehumanize and restrict rights of African Americans, including the right to vote, receive an education, and work. From 1865 to 1964, segregation and disenfranchisement laws known as “Jim Crow” plagued the South. These local and state laws legalized racial segregation and impacted every aspect of life, including the mandated segregation of schools, hospitals, parks, libraries, drinking fountains, restrooms, public transportation, and restaurants. Historically biased policies and practices have shaped present day structures and systems that contribute to racial disparities in both access and opportunities. The disparities present in these systems have contributed

to poor health outcomes among Black and Native families. Historical redlining (discriminatory practice that segregated neighborhoods and limited/denied financial services based on race/ethnicity and other marginalized identities) is an example and has been linked to numerous adverse health outcomes such as preterm birth, severe asthma, poor mental health, and lower life expectancy to name a few. (H. De los Santos, 2021)

Pregnant people living in the US who are Black die at three times the rate of their White counterparts, and American Indian/Alaska Native pregnant people die at two times the rate of their White peers. This gap widens as Black and American Indian/Alaska Native pregnant people age beyond 30 years old to an increased rate that is four to five times higher than the rate of White pregnant people in the US. (Petersen, 2019) A similar trend exists in the infant mortality and preterm birth disparities between Black and American Indian/Alaska Native babies who die and experience preterm birth at rates that are up to twice the rate for White babies.



(Ely, 2018) Research has demonstrated that race alone is not a risk for an adverse birth outcome. (David, 1997) (David R., 2007) However, there is a growing body of research demonstrating that exposure to racism and discrimination is directly connected to the health of an individual before, during, and after pregnancy. (David R., 2007)

"It is everybody's job to dismantle racism."

Dr. Zea Malawa

Solutions overview

National and place-based initiatives

National and place-based initiatives play a vital role in addressing major health challenges and are integral for making progress to dismantle racism and unequal treatment. These efforts help focus resources and efforts of numerous likeminded organizations and individuals to achieve significant improvements that no single organization can accomplish on its own. Initiatives give stakeholders a focus with clear objectives and an opportunity for collaborative strategic thinking.



Type	Solution/Program	Overview
National initiatives	Mom and Baby Action Network (M-BAN)	<p>M-BAN is a national network focused on collaboration, leveraging synergies, optimizing resources, decreasing silos, and strengthening alignment to advance maternal and infant health equity. A key function of M-BAN is to engage partners in facilitated learning opportunities to help change the paradigm of how maternal and child health work is done in the US and mobilize partners to address the most upstream causes driving inequities impacting families and communities. M-BAN is encouraging the community of practitioners to explore existing disparities through the lens of exposure to racism and discrimination, and highlighting practical ways in which partners can begin transforming harmful and complex systems, policies, and practices to dismantle racism and address unequal treatment more effectively. M-BAN hosts a dedicated workgroup with partner organizations and individuals to identify solutions and policies to advance together.</p> <ul style="list-style-type: none"> The Expanding Equitable Access to Doula Care Action Learning Community was created as a result of the work of the Dismantling Racism M-BAN workgroup, which identified doulas as one of the promising interventions to help create secure, high-quality maternity care environments for people at risk of receiving unfair treatment and discrimination. Monthly virtual Expanding Equitable Access to Doula Care ALC learning sessions focus on the assessment of 'doula friendliness' and education of maternity care providers on the integration of doulas as a strategy to improve birth outcomes and reduce disparities. The cohort is comprised of community-based doula organizations in Virginia, DC, and Missouri along with their clinical partners who look forward to taking action to improve access to doula care. <p>Learn more</p>
	Joint organizational commitment	<p>In 2021, four national maternal and child health organizations, AMCHP, CityMatCH, National Healthy Start Association, and NICHQ announced a joint action plan to become anti-racist and prioritize racial equity in their own organizational structures and operational models. Five key areas were prioritized: Understanding racial equity vs. health equity, acknowledging the power and influence public health institutions have to disrupt inequities created by racism, acknowledging that many solutions to advance maternal and infant morbidity and mortality already exist in communities experiencing disparities, focusing on action and creating a measurable plan, engaging communities and partners in new ways to have difficult conversations and acknowledging the historical role national organizations have played in supporting inequitable systems while also being willing to repair relationships. Organizations hoping to advance racial equity and anti-racist practices intentionally in their structures can learn from this Joint Commitment and the key areas of focus.</p> <p>Learn more</p>

Type	Solution/Program	Overview
Place-based initiatives	B'More for Healthy Babies	<p>Recognizing the need to purposefully take a coordinated and long-term approach to dismantling harmful systems and rebuilding healing ones, B'More for Healthy Babies (BHB) was launched in 2009. BHB is a multi-pronged initiative dedicated to reducing infant mortality in Baltimore City through programs highlighting policy change, service improvements, community mobilization, and behavior change. BHB is dedicated to decreasing three leading causes of infant mortality: preterm birth, low birthweight, and unsafe sleep.</p> <p>Since its launch, BHB has advanced solutions to reduce the infant mortality rate in Baltimore city by 28%, sleep related deaths have dropped by 40% and low birthweight has gone down by 10%. BHB is led by the Baltimore City Health Department with lead partners Family League of Baltimore and HealthCare Access Maryland and implemented with more than 100 partner agencies.</p> <p>BHB was built on multi-sector partnership and collaboration at the policy level and in the community. BHB has invested in policy and service improvements that link pregnant women to supportive services and ensure consistent messaging around safe sleep for infants and other key priorities via media, providers, and community partners. BHB has exemplified the meaning of “together we can achieve what we cannot achieve alone” by bringing together leaders from different city agencies, medical systems, and communities to improve maternal and child health policy.</p> <p>Learn more</p>
	Nurture New Jersey	<p>Nurture New Jersey is a state-wide initiative focused on policy, systems, and data solutions to advance equity in maternal and infant health outcomes. In 2018, New Jersey's Healthy Women Healthy Families initiative awarded \$4.3 million in an effort to improve maternal and infant health outcomes for Black families. In 2019, Governor Phil Murphy signed legislation to establish a state Maternal Mortality Review Committee. 2019 also saw the launch of Nurture NJ, a statewide initiative establishing a “multi-pronged, multi-agency approach to improve maternal and infant health among New Jersey women and birthing people and children.” Nurture NJ focuses on historical, social, political, and economic influences on maternal and infant health. That year also saw the launch of NJ Department of Health's Maternal Data Center to share high quality maternal and infant health data to drive improvements. The Nurture NJ Strategic Plan released in 2021 is designed to make transformational change and can be used as a model for other states embarking on similar state-wide initiatives. This initiative also demonstrates how meaningful long-term investments in funding, dedicated staff, and time are critical to accomplish the integral changes to improve maternal and infant health equity.</p> <p>In 2023, the “Tackling the Maternal and Infant Health Crisis: A Governor's Playbook” was released, outlining 32 policy recommendations that are in practice and feasible for state governments to implement. Policies include examples to:</p> <ul style="list-style-type: none"> • build infrastructure for sustained success. • increase access to perinatal care. • advance health equity for Black and American Indian and Alaskan Native people. • focus on non-medical root causes. • grow and diversify perinatal workforce. <p>Each section includes an overview of several policies and examples of states that have advanced them. This guide is also useful for organizations and initiatives working on policy and systems solutions to address maternal and infant health equity.</p> <p>Learn more</p>

Community-based impact

Community-based organizations (CBOs) play a pivotal role in advancing equity and providing social support services to families during the perinatal period. CBOs address critical gaps in maternal and infant health needs for marginalized communities and are essential to reducing health disparities. CBOs utilize a community-driven approach and are equipped to deliver culturally responsive models of care. These programming models assist in providing access to services beyond the traditional healthcare system, including access to community-based doulas and health workers, home visiting services, basic necessities (like diapers, food, clothing, and emergency relief goods), and referrals to other programs.

CBOs are essential partners and participants in the development of strategies and solutions to improve equity and address high rates of poor maternal and infant health outcomes. Many CBOs are led by members of the communities they serve, with the goal of strengthening their own communities and providing support at the intersection of maternal and infant health and racial equity. CBOs often employ a community-based workforce that holds deep community expertise and is profoundly invested in the well-being of their own neighborhoods and communities. Community collaborations with local and state government and with local health systems assist in creating policies and platforms that appropriately address system issues and gaps in care while also decreasing maternal and infant health inequities.

For example:

Type	Solution/Program	Overview
Community-based impact	Uzazi Village	<p>Uzazi Village is a non-profit organization based in Kansas City, Missouri whose mission is to center Black and brown families in maternal infant health with the vision for every family, a healthy baby; for every baby, a healthy village. In addition to offering free childbirth and breastfeeding education, Uzazi Village offers doula services and trains community-based doulas through the Sister Doulas program. The organization also offers a group prenatal care clinic and facilitates transformative training to assist healthcare organizations to embrace anti-racist practice and culture. Members of Uzazi Village have partnered with local healthcare system providers and administrators to educate clinicians on implicit bias and harmful practices contributing to disrespectful care, while developing strategies to more deliberately improve the quality of care received by community members in the area. Their goals are focused on improvements in preterm birth and low birthweight rates, breastfeeding initiation and duration, interpregnancy intervals, pregnancy complication management, pregnancy self-care efficacy, quality and access to healthcare, community midwife and doula restoration, and people of color entering perinatal professions. Their work focuses on the community level to:</p> <ul style="list-style-type: none">• understand healthcare gaps affecting families.• support and advocate for Black and brown childbearing women and their families.• include community in the process by holding community conversations to reframe social drivers of health in the community.• ensure the next generation of birth workers of color reflect community values.• prioritize healthcare improvements through partnerships and research. <p>This example demonstrates how CBOs can successfully provide a variety of services and support to fill gaps in the current healthcare and social support systems.</p> <p>Learn more</p>

Type	Solution/Program	Overview
	Tulsa Birth Equity Initiative (TBEI)	<p>Tulsa Birth Equity Initiative is dedicated to addressing the disproportionate rates of maternal morbidity and mortality in Tulsa, OK. Working closely with community partners, TBEI works to explore and implement evidence-based strategies to address gaps in maternal health. Community voice is embedded in all aspects of their work to address gaps in maternal health, enforce policies, and support Black and Native communities. TBEI advances work through several avenues including:</p> <ul style="list-style-type: none"> • a community-based doula program. • peer support community events. • advancing hospital quality improvement plans. • providing consumer education on preconception wellness. • public awareness and outreach campaigns. • collaborating with stakeholders to develop and promote better pregnancy and birthing policies in the state. <p>TBEI's community-based doula training highlights the importance of connecting underserved pregnant people to doulas in their communities who are specifically trained to provide support during pregnancy, birth, and postpartum. Their doula training is offered in partnership with HealthConnect One, a leader in advancing equitable community-based peer to peer support for pregnancy, birth, breastfeeding, and parenting.</p> <p>TBEI has also implemented the Hospital Quality Improvement Program promoting TeamBirth, an innovative strategy that ensures that those giving birth, their support, and healthcare providers share input and understanding in all decisions during labor and delivery.</p> <p>These initiatives all play an active role in dismantling racism in our systems and promoting equitable practices to strengthen maternal and infant health outcomes.</p> <p>Learn more</p>

Policy and systems solutions

Policy and legislative change is an integral step in enforcing action to dismantle racism and address unequal treatment. For example, requiring the collection and reporting of disaggregated data by race and ethnicity allows for universal accountability and transparency in the monitoring and quality improvement of delivery of care and services. Additionally, creating anti-racist designations along with public-facing racial equity data dashboards, and adopting the National Standards for Culturally and Linguistically Appropriate Services are ways to ensure a uniform public expectation baseline for the standard of maternal infant care and other services offered to individuals and their families. While the goal of M-BAN is to advance policies at the federal level, progress can be accelerated by advancing policies at the state level. For a list of Policy and Legislative Change Solutions proposed by members of M-BAN, see [Appendix B](#).

System and institutional change is a necessary and wide-reaching approach to help dismantle racism and address unequal treatment across complex systems and institutions. For example, implementing equity review boards to review proposed legislation and policies as well as using equity assessment tools to review existing programs, policies, or legislation ensure that unintended consequences that may amplify structural/institutional racism can be appropriately mitigated. Similarly, altering hospital and clinical procedures to collect and meaningfully report on patient experience with perceived racism and unequal treatment can inform quality improvement efforts. For a list of System and Institutional Change Solutions proposed by members of M-BAN, see [Appendix B](#).

For example:

Type	Solution/Program	Overview
Training State policy	March of Dimes Beyond Labels Stigma Reduction Toolkit (SHORT/ IMMEDIATE)	<p>Designed for people who work in health-related fields, this interactive toolkit assists users in learning how stigma can impact the healthcare and support women and birthing people need, seek, and receive. The multimedia training platform provides stories about the impact of stigma, and opportunities to learn about specific ways you can become a change agent to reduce stigma in your workplace or community. In addition to the toolkit, organizations can arrange live interactive trainings and learning opportunities.</p> <p>Learn more</p>
	Project Implicit (SHORT/ IMMEDIATE)	<p>Project Implicit a non-profit organization and is the product of a team of scientists whose research produced new ways of understanding attitudes, stereotypes, and other hidden biases that influence perception, judgment, and action. Researchers and collaborators translate academic research into practical applications for addressing diversity, improving decision-making, and increasing the likelihood that practices are aligned with personal and organizational values. Project Implicit delivers education services, programming services, and consulting for organizations.</p> <p>Organizations and individuals can access resources, take an implicit association test (IAT) on multiple topics such as race, disabilities, gender, weight, and more.</p> <p>Learn more</p>
	The Government Alliance on Race & Equity (GARE) (SHORT/ IMMEDIATE)	<p>GARE, a joint project of the new Race Forward and the Othering & Belonging Institute at UC Berkeley. It's a membership network for communities, governments, and other institutions with a vision to achieve racial equity and advance opportunities for all. GARE uses the following six strategies:</p> <ul style="list-style-type: none"> • Use racial equity framework • Build organizational capacity • Implement racial equity tools • Be data-driven • Partner with other institutions and communities • Operate with urgency and accountability <p>GARE provides tools, resource guides, events, and training to help leaders to dismantle racism and create equitable outcomes for all.</p> <p>Learn more</p>
Communica- tions	Hear Her Campaign (SHORT/ IMMEDIATE)	<p>In 2020, the US Department of Health and Human Services' Office of Minority Health (OMH)—in partnership with the Center for Disease Control and Prevention—launched a new campaign: “Hear Her.” The Hear Her campaign seeks to raise awareness of urgent warning signs of severe maternal morbidity and improve communication between patients and their healthcare providers. This is done by sharing life-saving messages and encouraging anyone who supports pregnant and postpartum individuals to listen to their concerns and better understand warning signs. Through this effort, multimedia resources have been created to amplify experiences of Black, American Indian, and Alaska Native women and emphasizes the importance and role of healthcare providers have in providing respectful and timely care that is responsive to patients’ vocalized needs.</p> <p>Organizations and individuals can access the free resources and materials.</p> <p>Learn more</p>

“A woman knows her body. Listening and acting upon her concerns during or after pregnancy could save her life.” **Dr. Wanda Barfield**

Research and data solutions

Research and data are necessary for growing the body of evidence needed to dismantle racism and address unequal treatment effectively and strategically. Data collection and consensus in definitions are lacking, making it difficult to track progress. Establishing consensus among stakeholders on which indicators and dimensions could be used to adequately represent layers and conditions of racism and discrimination, including structural and political determinants of health, will assist in effectively tracking trends and measuring progress. For example, developing a compendium of measures of racism could facilitate

the addition of racism measures on national surveys and the US Birth Certificate to accurately measure and capture multi-level experiences of racism as an indicator of health. In addition, developing anti-racist research and scientific best practices may help shift the paradigm from a reductionist and deficit-based research approach to an asset-based, comprehensive, and intersectional frame. Such a frame will be useful to guide research and science that is more effective in informing policies and actions needed to recognize and dismantle deeply entrenched racism. For a list of Research and Data Solutions, proposed by members of M-BAN Network, see [Appendix B](#).

Type	Solution/Program	Overview
Data/Research	NW Portland Area Indian Health Board - IDEA-NW	<p>Native people are often incorrectly classified in vital statistics and public health data sets, or dismissed altogether because of “too small numbers,” ignoring genocide as one of the key reasons that has contributed to the loss of tribal community members. These inaccuracies make it difficult to measure, describe, and accurately report the health of tribal communities. To improve data systems and provide Northwest tribes with local-level health data, the Northwest Portland Area Indian Health Board launched the IDEA-NW Project aimed to correct misclassified American Indian and Alaska Native data records in state surveillance systems and provide tribes with data in community health assessments, planning, grant writing, and policy development. The IDEA-NW project addresses data challenges and improves tribal data sovereignty by increasing Northwest Tribes’ access to accurate public health data for their communities.</p> <p>Additionally, IDEA-NW seeks to modernize and link NPAIHB’s data reporting systems by developing a Northwest Tribal Data Hub to provide Tribes with easy access to regional, state, and community-level public health data. The data hub provides an avenue for record linkage. Record linkage is the process of comparing records across data sets to identify individuals contained in both. In Indian Country, one common example involves taking a data source with accurate information about American Indian/Alaska Native ancestry and linking it with a second dataset to improve the quality of race information in the second database.</p> <p>Resources for pursuing record linkages are provided including a getting started guide, software recommendations, and sample IRB protocols.</p> <p>This is a great example for other efforts focused on data accuracy and transparency for improving equitable health outcomes.</p> <p>Learn more</p>
	Kellogg Family Foundation Racial Equity and Health Data Dashboard	<p>KFF’s Racial Equity and Health Data Dashboard gathers key data documenting inequities and the factors driving them. The data dashboard looks at the broader social and economic inequities that are rooted in structural and systemic barriers across sectors including racism and discrimination. Data in the dashboard includes:</p> <ul style="list-style-type: none"> • Vaccine data – COVID-19 vaccinations • ACA Coverage – uninsured, Medicaid expansion • Racial bias and discrimination data • Health status – infant mortality • Economic and social factors – internet access, income <p>Learn more</p>

Type	Solution/Program	Overview
Data/Research	The Pregnancy Risk Assessment Monitoring System (PRAMS)	<p>PRAMS, a surveillance project of the CDC and state health departments, aims to collect “site-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy,” and covers approximately 81% of US births. The PRAMS questionnaire consists of both mandatory (core) and optional (standard) questions. While some states include standard questions on discrimination, more than 50% of states do not. More consistently integrating validated questions to measure experiences of racism and discrimination before, during, and after pregnancy can play a vital role in guiding and measuring efforts aimed at closing the racial gap in infant and maternal health inequities.</p> <p>PRAMS provides data that is not available from other sources and can be used by researchers to investigate emerging issues in the field of reproductive health and by state, territory, and local governments to plan and review programs and policies aimed at reducing adverse maternal and infant health issues.</p> <p>Learn more</p>
	Mother and Newborn Information for Tracking Outcomes and Results (MoNITOR) Group.	<p>MoNITOR serves as a technical advisory body to the WHO to assist with measurement, metrics, and monitoring of maternal and newborn health for the Departments of Maternal, Newborn, Child and Adolescent Health and Reproductive Health and Research. The purpose of MoNITOR is to provide clear and strategic advice for global and country teams engaged in maternal and newborn measurement and accountability.</p> <p>Learn more</p>



Leveraging technology to improve maternal and infant health

Technology tools have the ability to improve the perinatal experience by connecting patients with culturally congruent providers by connecting patients with their peers, and also to promote storytelling of Black and Indigenous experiences that are often dismissed. Real-time data is important to eliminate health disparities as much of our public health data is dated. Technology allows an opportunity for community collaboration in reducing health disparities. Examples like the Irth app and Believe Her app focus on elevating the stories and experiences of Black and Indigenous women with an emphasis on promoting community building and ending bias and racism in maternity care.

"Just being a Black woman places you at a higher risk of poor birth outcomes...and at the root of it are the stresses of racism and the biased treatment you may receive."

Kimberly Seals Allers

"I see inequity wherever it exists, call it by name, and work to eliminate it."

Dr. Shalon Irving

For example:

Type	Solution/Program	Overview
Leveraging technology	Irth App by Narrative Nation (SHORT/ IMMEDIATE AND LONG-TERM)	<p>Far too many Black and brown women and pregnant people have a story or have a friend or family member who have died in childbirth. Often these stories bring to light mistreatment, neglect, or dismissiveness by medical staff. To support Black and brown moms prior to going to the hospital, Kimberly Seals Allers of Narrative Nation created the Irth app. The origin of the name Irth is birth, but spelled intentionally without the B, which represents bias. The Irth App creates awareness and evidence as to how healthcare providers, systems, and policies impact specific groups in our society.</p> <p>The app features a one of a kind "Yelp-like" review and rating system specifically for Black and brown women and birthing people to find and leave reviews of maternity and pediatric physicians and birthing hospitals. This app also creates a platform for moms to share their experiences of care and provides new moms the opportunity to find hospitals and physician reviews written by fellow moms. Filters are available for users to tailor their search by race, ethnicity, sexual orientation, gender identification, income, etc. Irth captures prenatal, birthing, postpartum, and pediatric visits for up to one year to offer a new lens for looking at experiences of bias across the maternity and infant care continuum. Users are able to find a real-time, peer reviewed, and trusted provider in seconds which is a known factor in improving patient compliance and behavior change.</p> <p>Irth has also partnered with hospitals in a pilot program to better understand and improve Black patient's experiences by utilizing both qualitative and quantitative data. Patient-provided reviews on the Irth app fill the gap for Black and brown patient voices to better inform anti-bias efforts, hospital quality improvement, and advance more equitable care. Hospital systems can partner with Irth to improve their feedback loop from the community they serve to advance quality maternal healthcare and outcomes.</p> <p>Learn more</p>
	Dr. Shalon's Maternal Action Project (DSMAP) (SHORT/ IMMEDIATE IMMEDIATE)	<p>Dr. Shalon's Maternal Action Project (DSMAP) is based on the life and philosophy of Dr. Shalon Irving and aims to increase awareness of the Black maternal health crisis by developing and promoting evidence-based strategies that improve health outcomes for Black women and families. DSMAP developed the Believe Her App, an anonymous peer support app with the mission to increase awareness of the Black maternal health crisis and develop evidence-based strategies that improve outcomes for Black women.</p> <p>This app assists with creating a sense of community and healing while learning from others and their experience. Believe Her is providing a digital space where moms and pregnant people feel supported and believed.</p> <p>Learn more</p>

Tools and resources

March of Dimes Report Card

The annual March of Dimes Report Card highlights the latest key indicators to describe and improve maternal and infant health in the US. It features grades for preterm birth and measures on infant mortality in addition to social drivers of health, low-risk Cesarean births, and inadequate prenatal care. The report describes racial inequities, as well as systems and policies opportunities that can help level the playing field and improve health outcomes for all families.

Racial Equity Tools Glossary

This glossary contains useful definitions and clear sources that users can pursue to deepen their own learning about key concepts and terms.

Black Maternal Health Resource List

A brief list of information and resources provided by Every Mother Counts related to racism and the Black maternal health crisis in the US.

Truth, Racial Healing, and Transformation Implementation Guide by the W.K. Kellogg Foundation

Truth, Racial Healing & Transformation is a comprehensive, national, and community-based process to plan for and bring about transformational and sustainable change, and to address the historic and contemporary effects of racism.

Preventing Maternal Mortality Resource Kit (Relias)

Tools and resources to identify, understand, and reduce maternal health risks and death.

National Institute for Children's Health Quality Four Steps to Address Racism's Impact on MCH

Overview of a NICHQ-led training that shares four impactful steps everyone can take to address racism in the healthcare system.

Liberation Ventures: A Dream in Our Name

This report offers the Racial Repair Framework for channeling aspirations for racial healing into concrete steps and actions that readers are invited to explore and adopt.

Advancing Racial Equity in Maternal Mental Health Policy (The Center for Law and Social Policy)

This brief offers a variety of strategies that policymakers and advocates can use to advance racial equity in maternal mental health. It offers many effective models from communities across the country.

Publications and media

[Stigma in Health Facilities: Why it matters and how we can change it \(BMC Medicine\)](#)

2019 article, the “Stigma in health facilities: why it matters and how we can change it.”

[Role of Racism as a Core Patient Safety Issue \(Institute for Healthcare Improvement\)](#)

This article describes three things healthcare leaders can do to understand the contributing causes of mortality, including racism and factors to reduce inequities and improve safety in maternal health.

[Racism in healthcare: What you need to know \(Medical News Today\)](#)

News article on how racial discrimination permeates healthcare systems having negative consequences for both patients and healthcare workers, leading to higher risks of illness and, in some cases, lower standards of care for people of color.

[The Roots of Structural Racism Project](#)

A report from Berkley’s Othering & Belonging Institute investigating the persistence of racial residential segregation across the US. The report contains key findings about the intensification of racial residential segregation in recent decades, an interactive mapping tool, a collection of tables, and city profiles.

[The Impact of Racism on Child and Adolescent Health](#)

Article reviewing “The Impact of Racism on Child and Adolescent Health” published in Pediatrics.

[9 Ways Racism Impacts Maternal Health \(PBS\)](#)

PBS article outlining how anti-Black racism, intersectional violence, and transgenerational trauma directly impact maternal health.

Strategy: Increase access to high-quality healthcare



Solution overview

The United States is the only high income and high resource nation that has a rising maternal mortality rate, with large racial and ethnic disparities for Black, Hispanic, and American Indian/Alaskan Native women and pregnant people. These groups are disproportionately exposed to health risks due to historical and persistent policies and norms perpetuated by segregation, bias, and discrimination, also influencing the quality, quantity, and coordination of care, services, and community resources received. (Altman, 2019) (McLemore, 2018) Infant health is associated with poor maternal health, which is in large part impacted by upstream factors, social drivers of health. (Bryant, 2023) There's a documented association between preterm birth (PTB) and social drivers of health (SDOH), in particular between exposure to racism and income, maternal education and parental occupation. Preterm birth is a major public health problem as it remains the second leading cause of infant mortality in the US and the leading cause of infant mortality for Black infants. Neonate health is associated with poor maternal health, which is in large part impacted by upstream factors such as economic insecurity, environmental pollution, and chronic stress. (Bryant, 2023) (Lorch, 2016)

The legacy of racism in the US is also embedded in our healthcare system. For many Black, Hispanic, and American Indian/Alaskan Native people, this legacy has meant less access to quality care leading to poorer health outcomes. Black and brown women experience maternal health complications at a higher rate than their white counterparts. (National Center for Health Statistics, 2023) Additionally, access to care and affordability of care also play essential roles in the rising maternal health disparities in the US. Other factors include lack of access to culturally appropriate care, especially for individuals living in rural areas, areas classified as maternity care deserts, and areas that lack culturally congruent maternity care providers, who can provide culturally appropriate and culturally responsive care.

Cultural congruency in healthcare describes the ability of systems to provide care to patients with diverse values, beliefs, and behaviors, including the tailoring of healthcare delivery to meet patients' social, cultural, and linguistic needs. (Schim, 2007) Implicit bias and stigma are often associated with lower quality and inappropriate care. To increase access to culturally congruent care, implicit and explicit biases must be acknowledged and actively addressed through training and organizational accountability. Additionally, workforce development and growth opportunities—especially for Black, Hispanic and American Indian/Alaskan Native populations—need to be readily available.



Access to quality and appropriate obstetric-gynecological care in rural areas is on the decline, which has led to worsening disparities especially in Black and American Indian/Alaskan Native populations. (The American College of Obstetricians and Gynecologists, 2020) Rural communities tend to face additional challenges due to sparse availability of healthcare facilities and providers. According to a recent report from March of Dimes, over 5.6 million women and nearly 350,000 births (12%) occur in areas with low or no access to maternal healthcare. (Brigance, 2022) Medicaid plays a significant role in covering costs of deliveries in both rural and urban areas and is the single largest payer of perinatal care.

To improve adverse outcomes, we must start addressing root causes of poor maternal health and preterm birth to support the overall health and wellbeing of the nation’s population. In addition to systematically addressing social drivers of health, efforts must also include improving equitable access and quality of healthcare services, as part of a system of care that is responsive to patient’s needs through the delivery of respectful, safe, high-value, high-quality care for all, regardless of wealth, race, gender, or geography.

Access to quality healthcare services means having timely use of personal health services to achieve the best health outcomes. Access to facilities and coverage, timeliness, and the workforce are key elements that ultimately lay the foundation of a person’s journey through the US healthcare system. However, geographical and cultural factors can play a role in these services not being accessible. While those four components are helpful in providing care, all care should be equitable and of high quality no matter the neighborhood or jurisdiction in order for us to collectively achieve the best health outcomes.

According to the Maternal Health Taskforce at Harvard T.H Chan School of Public Health, high quality healthcare should be safe, effective, timely, efficient, equitable, and people centered.

High-quality healthcare should be:	Definition
Safe	Delivering healthcare which minimizes risks and harm to service users, including avoiding preventable injuries and reducing medical errors
Effective	Providing services based on scientific knowledge and evidence-based guidelines
Timely	Reducing delays in providing and receiving healthcare
Efficient	Delivering healthcare in a manner that maximizes resource use and avoids waste
Equitable	Delivering healthcare that does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status
People centered	Providing care which takes into account the preferences and aspirations of individual service users and the cultures of their communities

* Source: (Harvard T.H. Chan School of Public Health, 2022)

Research and data snapshot

"Quality healthcare values community and person-reported experiences as core, validated data, as well as trust that if disparity exists, there is a disparity in the system"

Nubia, Birth Companion NY

To strengthen access to quality healthcare in the US, one must also acknowledge the mistrust associated with the US healthcare system. The history of abuse and neglect has led to a deep-rooted mistrust of healthcare institutions and practitioners. Black, Hispanic, and American Indian/American Native people have been exploited for research purposes, including experimental reproductive surgeries, enforced eugenics programs that sterilized Black women and hospital teaching programs that performed unnecessary hysterectomies. Understanding and acknowledging these historical impacts can assist healthcare professionals in providing culturally congruent care while also assisting the shift in current policies and practices that justify inequities. In a 2019 study, researchers found that experiences during pregnancy by people of color were influenced by provider treatment. (Altman, 2019) Women and pregnant people may be more inclined to decline procedures during and immediately following birth when they felt they were being discriminated against. (Attanasio, 2019) This may create a provider-patient relationship that lacks trust, where the provider perceives the patient as uncooperative and the patient experiences poor treatment.

Quality and respectful care throughout pregnancy and the postpartum period are essential to ensure the health and well-being of families. The Giving Voice to Mothers study examined how race, ethnicity, and place of birth interact with the experience of receiving maternity care in the US. This study used indicators developed by participants to describe mistreatment in childbirth. Findings suggested that mistreatment is experienced more frequently by women of color, when birth occurs in hospitals and among those with social, economic, or health challenges. Of eligible participants (n = 2700), 1 in 6 women (17.3%) reported experiencing one or more types of mistreatment such as: loss of autonomy; being shouted at, scolded, or threatened;

and being ignored, refused, or receiving no response to requests for help. (Vedam, 2019)

While there are many historical barriers that have laid the foundation for the current healthcare system, geographic, economic and communication barriers play key roles when identifying solutions to improve access to quality care in the US.



After years of observing disproportionate health outcomes for Black people and other minorities in comparison to their White counterparts, in 1985 the Secretary of Health and Human Services (HHS), Margaret Heckler, formed a task force to describe the health outcomes more fully and to consider how the federal government could address them. The Secretary's Task Force on Black and Minority Health observed and surveyed HHS agencies to identify what was currently in place to focus on improving the health of minority populations. HHS then consulted with experts in minority health to improve health outcomes. This landmark report marked the first convening of a group of health experts by the US government to conduct a comprehensive study of racial and ethnic minority health and elevated minority health onto a national stage.

Access to maternity care providers and support services

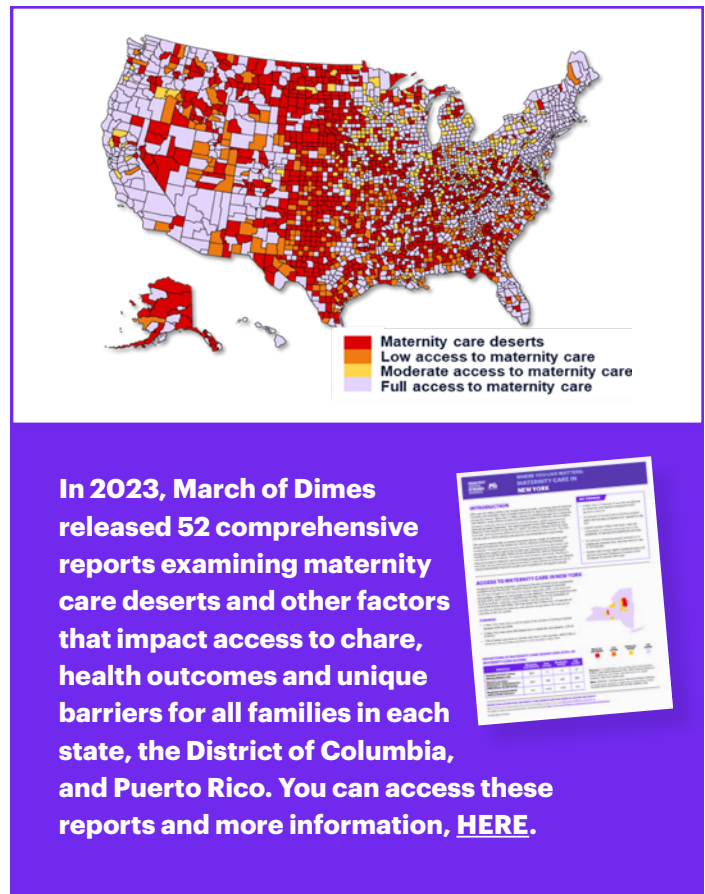
When defining gaps in maternity care, affordability and geographical access play major roles. Geographical access to care is a major factor contributing to maternal and infant health inequities in the US. One measure of lack of maternity care access is the proximity of maternity care services. Maternity care deserts are defined as counties in which access to maternity healthcare services is limited or absent, either through lack of obstetric care services (providers, hospitals, or birth centers) or barriers to a woman's ability to access that care. About 36% of US counties are maternity care deserts. More than 2.2 million women and pregnant people live in maternity care deserts (1,095 counties) that have no hospital offering obstetric care, no birth center, and no obstetric provider. (Brigance, 2022)

In 2020, more than a quarter of Native American babies and 1 in 6 Black babies were born in areas with limited or no maternity care. (Brigance, 2022) Access is not just an issue for rural populations—geographic healthcare access barriers exist in rural, suburbs, and urban regions, especially for racial and ethnic minorities.

Access to quality health insurance is essential to advance health equity in the US. About 1 in 10 people in the US don't have health insurance. (Berchick, 2018) To curb the rising rates of maternal and infant morbidity and mortality, women and pregnant people need access to high-quality healthcare throughout their lives. Between 2010 and 2019, over 7 million women and birthing people of reproductive age (15-44) gained health coverage. (Sugar S., 2022) While this was a significant gain, approximately 7.9 million women of reproductive age remain uninsured. (Sugar S., 2022) Ensuring access to comprehensive and continuous care is also important for addressing our nation's growing rates of maternal mortality and severe maternal morbidity.

The need for postpartum services exists well beyond the current federal law limit of 60 days after pregnancy. The American Rescue Plan Act of 2021, starting April 2022, gives states the option to extend postpartum coverage to pregnant people to one full

year. (GovTrack.us, 2023) It's essential that Congress takes the next step to make 12 months of postpartum coverage mandatory and permanent under all state Medicaid programs.



Solutions overview

"I know for the communities that I serve, and that I have the honor of being present for, it means a lot for them to be heard and for their care to be centered. And also for there to be some cultural aspects included there... It's more about being immersed in the community. And holding space to kind of understand what their needs are, what their desires are, what their wants are. And knowing that that can shift over time and being able to shift along with that."

Nubia, Birth Companion NY

To address the inequalities in healthcare quality and access, it's crucial to implement changes at every level of our healthcare system.

Transformation needs to happen at the legislative, institutional, community, and interpersonal stages to create a sustainable and lasting impact on current healthcare disparities.

The World Health Organization (WHO) published a framework outlining eight standards for improving quality of maternal and newborn care in health facilities. This framework has the ability to evaluate how well healthcare services improve desired outcomes. Four of these highlight care that includes respect, dignity, emotional support, and a systemic commitment to patient-led, informed decision-making processes. This framework can be utilized when advancing solutions at the systems level.

Standards for Improving Quality of Maternal and Newborn Care in Health Facilities (WHO)

(World Health Organization, 2016)

Standard 1: Every woman and newborn receives routine, evidence-based care and management of complications during labor, childbirth, and the early postnatal period, according to WHO guidelines.

Standard 2: The health information system enables use of data to ensure early, appropriate action to improve the care of every woman and newborn.

Standard 3: Every woman and newborn with condition(s) that cannot be dealt with effectively with the available resources is appropriately referred.

Standard 4: Communication with women and their families is effective and responds to their needs and preferences.

Standard 5: Women and newborns receive care with respect and preservation of their dignity.

Standard 6: Every woman and her family are provided with emotional support that is sensitive to their needs and strengthens the woman's capability.

Standard 7: For every woman and newborn, competent, motivated staff are consistently available to provide routine care and manage complications.

Standard 8: The health facility has an appropriate physical environment, with adequate water, sanitation and energy supplies, medicines, supplies, and equipment for routine maternal and newborn care and management of complications.

National, state, and place-based initiatives

National, state, and place-based initiatives and programs play a vital role in advancing improvements and removing barriers to accessing high-quality healthcare. These efforts help focus resources and efforts of numerous likeminded organizations and individuals to achieve significant improvements that no single organization can accomplish on its own. Initiatives give stakeholders a focus with clear objectives and an opportunity for collaborative strategic thinking.

Initiatives at all levels should include communities and individuals as strategic partners when developing solutions. Ensuring that care is people centered

demonstrates responsiveness to needs regardless of wealth, race, or geography. Both accountability and responsiveness are essential components to establishing and maintaining high-quality care. A culture of accountability has the potential to prevent mistakes, establish clear policies and procedures, improve operations, and establish trust among patients and community members.

When it comes to healthcare quality and access, many national, state, and place-based initiatives and programs have shown tremendous success and are examples for others to learn from, align with, and amplify.

For example:

Type	Solution/Program	Overview
National initiative	Nurse-Family Partnership® (NFP) (Long-term investment)	<p>Nurse-Family Partnership® is a nationally run community health program operated at the local level in 40 states plus Washington D.C., the US Virgin Islands, and some Tribal communities. NFP is designed for first-time, low-income moms and their children. It includes one-on-one home visits by a trained public health registered nurse to participating clients. The visits begin early in the woman's pregnancy (with program enrollment no later than the 28th week of gestation) and conclude when the woman's child turns two years old. NFP is designed to improve (1) prenatal health and outcomes, (2) child health and development, and (3) families' economic self-sufficiency and/or maternal life course development. NFP has proven results and a 5X return on investment for the highest-risk families served.</p> <p>Learn more</p>
	Alliance for Innovation on Maternal Health (AIM) (Long-term planning and investment)	<p>The Alliance for Innovation on Maternal Health (AIM) is a national data-driven maternal safety and quality improvement initiative based on interdisciplinary consensus-based practices to improving maternal safety outcomes. AIM assists states and health systems in aligning national, state, and hospital level engagement efforts to improve maternal health outcomes. A partnership between HRSA and ACOG, the AIM program collaborated with experts in maternity care to develop clinical care protocols, also known as "Safety Bundles," for common conditions or procedures that may occur across the perinatal period. As of August 2023, 49 states and Washington, D.C. are enrolled and there are 1,917 participating birthing facilities in AIM. Any birthing facility can join through a state-based team that is supported by the AIM National Team.</p> <p>Learn more</p>
	HealthConnect One (HC One) Community-Based Doula Program (Short-term/more immediate impact)	<p>Founded in 1986 as the Chicago Breastfeeding Task Force as a place-based initiative, Chicago Health Connection—now HealthConnect One (2008)—has become nationally recognized for programs that result in fewer complications during birth, a decrease in rates of Cesarean births, an increase in breastfeeding rates and attachment between mom and baby, and an increase in moms' self-esteem and personal skills. HC One's most innovative work is the development of their Community-Based Doula Program, which provides support to young families during pregnancy, birth, and the early postpartum period. HC One's community-based doula program is the only home visiting program with a commitment to support during labor and birth, which evidence shows is integral to the program's success. The peer-to-peer relationship and the continuity of care knit a fabric of support around the family, which has a broad and deep impact on a variety of outcomes. HC One actively continues to support and train community-based doula programs, support planning for sustainability of programs, and collaborate nationally with stakeholders in support of local community health workers including doulas.</p> <p>Learn more</p>

Type	Solution/Program	Overview
National initiative	Merck for Mothers Safer Childbirth Cities Initiative	<p>This is a national funding initiative supporting community-based organizations in US cities experiencing a high burden of maternal mortality and morbidity to implement evidence-based and innovative approaches to reverse the country's maternal health trends. Launched in October 2018 by Merck for Mothers, Safer Childbirth Cities fosters local solutions that help cities become safer—and more equitable—places to give birth. There are 20 US cities currently being funded. Grantees engage communities and support stakeholders to bolster the care support system around women and families during pregnancy, childbirth, and the months after. Merck for Mothers provides an example for how corporations and philanthropists can work at the national level to support community-based solutions.</p> <p>Learn more</p>
	Preeclampsia Foundation: The Cuff Kit™ Program (short-term, immediate impact)	<p>Founded in 2000, the Preeclampsia Foundation is dedicated to improving hypertensive disorders of pregnancy through education, community support and engagement, improvement of healthcare practices, and research. The foundation provides a diverse array of resources and support.</p> <p>For example: Access to blood pressure measurement devices, economic hardship, or limited knowledge should not be barriers to home-based monitoring. Early detection of high blood pressure in pregnancy has the ability to improve maternal health outcomes. The foundation started providing the Cuff Kit™ as a first step to address the need for self-monitored blood pressure. The purpose of the Cuff Kit™ program is to enable accurate self-monitored blood pressure (SMBP) among pregnant and postpartum moms at highest risk for hypertensive disorders of pregnancy and to ensure their blood pressure measurements are accessible to their healthcare providers for care management. The program aims to improve self-efficacy among vulnerable populations by educating pregnant and birthing individuals about the importance of blood pressure screening during and after pregnancy and by providing the tools to conduct these measurements at home, leading to improved health outcomes. The kits include validated automatic blood pressure measurement devices and patient education materials (print, online, and video) that simply explain how to take accurate blood pressure readings and the importance of doing so during pregnancy and beyond. Healthcare systems and clinicians as well as community organizations can partner with philanthropists and funding opportunities to purchase the Cuff Kit™ for their patients.</p> <p>Learn more</p>
State, place-based initiatives, and community organizations	State Perinatal Quality Collaboratives (PQCs) (Long-term planning and impact)	<p>Perinatal Quality Collaboratives (PQCs) are state or multi-state networks of teams working to improve the quality of care for moms and babies. PQC members identify opportunities to improve healthcare processes and use the best available methods to make timely changes including state level policy recommendations and advocacy, systems improvements, communications, and data collection. The Centers for Disease Control and Prevention (CDC) provides support to states to establish PQCs. States are also supporting PQCs through their Title V Maternal and Child Health Block Grants. PQCs comprise interdisciplinary teams within a state or across states to engage in regional quality improvement initiatives. The aim of PQCs is to improve quality of care across the perinatal period but they are particularly focused on reducing racial and geographic disparities, reducing preterm birth and Cesarean sections among low-risk women, and improving providers' ability to address pregnancy complications such as eclampsia and hemorrhage. The National Network of Perinatal Quality Improvement Collaboratives (NNPQC) supports state based PQCs in making measurable improvements in statewide healthcare and health outcomes for moms and babies. There are many PQCs that have successfully tackled some complex challenges—review their case studies to understand how a PQC in your state can do the same.</p> <p>Learn more</p>

Type	Solution/Program	Overview
State, place-based initiatives, and community organizations	Maternal Mortality Review Committees: Organizing Voices for Action (OVA) – (long-term impact, short-term when it comes to seeing immediate opportunities for improvements – not sure how to categorize this one)	<p>Currently in the US, there's no comprehensive national approach that counts and reviews pregnancy-related deaths. The recommendation is that each pregnancy-related death is reviewed by a state or city based maternal mortality review committee (MMRC). State and city-based committees are multi-disciplinary and examine death records and available information including, medical, social services, and first responder documentation. Maternal mortality review committees do not solely examine the details of deaths, they also work with diverse stakeholders to review the circumstances including social drivers of health. They work together to move recommendations into action. Having a diverse group of stakeholders assists in addressing prevention methods from both a clinical and community health perspective. Ultimately, this makes it possible to improve the quality of care for moms across the maternity care spectrum. State MMRCs are funded and supported by state legislative action.</p> <p>For example: A clear example of addressing the rising maternal mortality rate and putting recommendations into action was done by the Philadelphia Department of Public Health, community stakeholders and Strategy Arts. The Philadelphia Department of Public Health partnered with Strategy Arts, a collective impact and community engagement firm to launch Organizing Voices for Action (OVA). OVA is a structured, multi-sector community action team dedicated to decreasing the incidence of maternal mortality in Philadelphia, PA. Comprised of a multidisciplinary group of stakeholders, including lived experience experts, OVA centers community voice in its work. To combat traditional systems that uphold white supremacist and racist practices, the OVA chose to focus on lived experience experts and see their perspectives as valid and credible. With prioritization of stakeholder and community engagement, the OVA has the ability to foster collaboration to address the root causes of maternal mortality.</p> <p>Learn more</p>
	NC Care 360 (Short-term – immediate impact once implemented)	<p>NCCARE360 is the first statewide network that unites healthcare and human services organizations with a shared technology that enables a coordinated, community-oriented, person-centered approach for delivering care in North Carolina. NCCARE360 helps providers electronically connect those with identified needs to community resources and allow for feedback and follow up. This solution ensures accountability for services delivered, provides a “no wrong door” approach, closes the loop on every referral made, and reports outcomes of that connection. NCCARE360 is available in all 100 counties across North Carolina. This example solution addresses the build safe and connected communities strategy and provides another approach to community care hubs.</p> <p>Learn more</p>
	March of Dimes Mom & Baby Mobile Health Centers® (short-term immediate impact)	<p>Mobile health clinics have the ability to provide a wide range of services to people who may not have access to care, whether that may be urgent care, primary care, or reproductive healthcare. This resource has proven to be a benefit to communities, by making healthcare both accessible and affordable for the patients it serves. March of Dimes Mom & Baby Mobile Health Centers®, in partnerships with local clinical providers offer services across five pillars of maternal and infant care: pre-pregnancy interventions, pregnancy interventions, postpartum interventions, newborn interventions, and primary healthcare interventions. These mobile health centers facilitate collaborative partnerships across multiple sectors and efficiently allocate financial and human resources to meet women and families in their communities.</p> <p>Learn more</p>

Policy and systems solutions

Addressing the current gaps and inequities in access and quality of healthcare for pregnant people will require both policy and systems solutions. Examples of these solutions include removing barriers preventing the full scope of qualified healthcare providers to deliver high-quality, high-value obstetrical and gynecological care, like defining scope of practice and ensuring private and public insurance reimbursements. Another way to improve quality of care could be to pass legislation requiring healthcare workers and related organizations to take comprehensive

implicit bias and anti-racism training that includes an overview of how bias and stigma along with social drivers of health can affect birth outcomes. Finally, a great example for how to increase access to quality care during labor and delivery could be to fund the creation of new freestanding birth centers in medically underserved areas. There are many more examples of policy and systems solutions that can be advanced to help improve access to and quality of healthcare during the continuum of care. For a list of proposed Policy and Systems Solutions proposed by members of M-BAN, see [Appendix C](#).

Type	Solution/Program	Overview
Policy and advocacy	Telehealth Services: Maternal Telehealth Access Project (immediate impact)	<p>There has been a significant effort to improve health equity for families in rural and underserved areas. Telehealth has proven to be one of many solutions to assist in bridging that gap and is a promising means to improve equitable delivery of care to communities in the greatest need.</p> <p>For example: The Maternal Telehealth Access Project is a collaborative initiative ensuring that birthing individuals at highest risk are receiving quality maternal care services via telehealth. Maternal Telehealth Access Project was funded in May 2020 for one year by the US Department of Health and Human Services Administration (HRSA) to increase access to quality maternity care and services via telehealth during (and beyond) the COVID-19 pandemic. The project focuses specifically on serving women and birthing individuals at greatest risk of maternal mortality and morbidity, including Black, Native American, and Latinx women, as well as women and pregnant people who live in rural and frontier communities. HHS provides a guide to highlight maternal telehealth needs, billing, and preparing patients and providers.</p> <p>Learn more</p>
	Medicaid Postpartum Coverage Extension (long-term investment but immediate impact once enacted)	<p>The Medicaid program finances approximately 42% of births in the US. Federal law requires states to provide pregnancy-related Medicaid coverage through 60 days postpartum. After this 60-day period, some individuals may qualify for Medicaid through a different entity. However, individuals with pregnancy-related Medicaid coverage typically lose their benefits 60 days postpartum. To strengthen maternal health outcomes and address racial disparities, the American Rescue Plan Act was signed into law in March of 2021. This act gives states an additional pathway to extend Medicaid postpartum coverage to one year postpartum. Thirty-five states and Washington, D.C. have already extended or plan to extend postpartum eligibility to Medicaid programs. States that have not yet adopted this critical coverage extension have an opportunity to engage cross-sector stakeholders and legislators to prioritize this effort in the next legislative period in your state.</p> <p>Learn more</p>
	National Health Law Program's Doula Medicaid Project (long-term investment but immediate impact)	<p>A growing body of evidence suggests that continuous support from doulas or other birth and labor support providers can improve birth and health outcomes for both moms and babies including: fewer preterm (Kozhimannil, 2016) and low birthweight infants (Gruber, 2016), reductions in Cesarean sections (Kozhimannil, 2016), and more likely to initiate breastfeeding (Gruber, 2016). Medicaid covers a significant number of births, and researchers modeling the cost-effectiveness of Medicaid coverage for doula services found calculated average savings of \$986 (Kozhimannil, 2016). The National Health Law Program's Doula Medicaid project works to improve access to doula care for Medicaid patients. Working in collaboration with other stakeholders they provide technical assistance and information sharing as they work to propose policies, pass legislation, and implement programs in states and regions. The project educates state agencies, legislators, and other stakeholders about expanding full-spectrum Medicaid coverage of doula care including prenatal and postpartum support, labor/delivery, miscarriage, stillbirth, and abortion. The project works to identify and overcome barriers to creating sustainable and equitable programs for doula care.</p> <p>Learn more</p>

Type	Solution/Program	Overview
Systems	Heart Safe Motherhood™ (short-term and immediate impact once implemented)	<p>Heart Safe Motherhood™ (HSM) is a systems level approach integrating a text-based program for postpartum at-home blood pressure monitoring. HSM assists patients in tracking their blood pressure from their home and communicates effectively with their care team without visiting a doctor's office. HSM includes patient engagement that begins at discharge with automated reminders, feedback and surveillance enabled by the Way to Health platform. Providers engage with the program by focusing on the information they need to know through alerts and dashboards. Only patients with concerning blood pressure or symptoms may be asked to come in for an appointment. Participants are given a digital blood pressure monitor for at-home use. Training on how to use the monitor and education about the program occur prior to discharge. If a patient's blood pressure is high enough to require intervention, the platform sends real-time alerts to providers. HSM drives better maternal outcomes, improves patient experience, and reduces the total cost of care for women with pregnancy-related and chronic hypertension in the immediate postpartum period.</p> <p>Learn more</p>
	Smooth Transitions™ (long-term planning and investment with immediate impact once implemented)	<p>Families who choose to give birth at home or in a freestanding birth center deserve the best possible care when the plan changes and they need to access hospital services. Smooth Transitions™ is a Washington state-based quality improvement program enhancing the safety of these hospital transfers. We bring together community midwives, hospital providers and staff, and EMS personnel to build a collaborative model of care that puts birthing families at the center. The goals of the program include improving the whole person safety and efficiency of the transfer process by establishing system-wide protocols, collecting and analyzing transfer outcome data for quality improvement, building greater collaboration between community-based midwives, EMS and hospital care teams, and enhancing the patient experience of care when transfers occur. This is a great example program to improve patient safety through a systems level approach. Smooth Transitions™ provides resources and a guide with program steps for other states and hospital quality improvement efforts to utilize in systems coordination improvements.</p> <p>Learn more</p>
	Project Swaddle (short term and immediate impact)	<p>Project Swaddle is a community paramedicine program based in Montgomery County, Indiana. Launched in April 2018, project swaddle seeks to reduce maternal and infant mortality in pregnant women who are high risk for adverse health outcomes. Services are provided through home-based visits with a community paramedic trained in maternal and infant health. Project Swaddle, in partnership with community stakeholders, has been successful in providing community-based support to help address the high rates of maternal and infant mortality in Indiana. A key to the success includes the lead partnership between the Crawfordsville Fire Department EMS Division Chief, Franciscan Health's paramedicine program and the Indiana Department of Health. Incorporating paramedics in the healthcare team has extended prenatal and postnatal care to those in the community who experience barriers to accessing care. This initiative provides an example for hospital systems and paramedicine to work collaboratively to remove care access barriers and improve outcomes.</p> <p>Learn more</p>

Communication and training

Solutions that address communications and training include activities that may improve the way care is given, increase the number and quality of culturally congruent workforce, improve how providers and patients interact, and increase consumer and provider awareness about best-practices and services. Some of these solutions include community level public awareness campaigns to spread information about evidence informed programs being implemented like group prenatal care. Other ideas shared by experts

include professional education around best practices to provide the highest quality of care, and sharing/ advancement of currently available toolkits that address healthcare quality improvement. For a list of Communication and Training Solutions proposed by members of M-BAN, see [Appendix C](#).

For example:

Type	Solution/Program	Overview
Communications and training	Awareness to Action: Dismantling Bias in Maternal and Infant Healthcare™ (short-term)	<p>Implicit and explicit biases are among many factors that contribute to disparities in health and healthcare. A review of studies involving physicians, nurses, and other medical professionals found that healthcare providers' implicit racial bias is associated with diagnostic uncertainty and, for Black patients, negative ratings of their clinical interactions, less patient-centeredness, poor provider communication, under treatment of pain, views of Black patients as less medically adherent than White patients, and other ill effects.</p> <p>For example: March of Dimes' Awareness to Action: Dismantling Bias in Maternal and Infant Healthcare™ provides authentic, compelling content for healthcare providers caring for birthing people before, during, and after pregnancy. Organizations and individuals can participate in virtual asynchronous or live trainings. Training participants will be able to: understand and identify implicit bias; explain how structural racism has played a key role in shaping care settings and contributes to implicit biases in patient/provider encounters; recognize one's potential for implicit bias and apply strategies and practice cultural humility to mitigate their own biases; and recognize and establish a culture of equity.</p> <p>Learn more</p>
	Washington Blue Band Initiative (Short Term and immediate impact)	<p>The Blue Band Initiative is a simple solution for patients to communicate with providers. Patients who are at risk for preeclampsia or having elevated blood pressure after giving birth wear a blue wrist band during pregnancy and after delivery of their babies in an effort to alert healthcare providers about their risk. The initiative includes guidelines and resources for implementing the blue band communication.</p> <p>Learn more</p>
	Low Dose Aspirin to Prevent Preeclampsia Campaign (short-term and immediate impact)	<p>The California Maternal Quality Care Collaborative, in partnership with March of Dimes, select statewide hospitals, and community partners are collaborating to promote the awareness and use of low-dose aspirin for pregnant women and people at risk for preeclampsia. The campaign includes resources for both patients and providers such as info sheets, patient scorecards, hospital toolkits and posters.</p> <p>Learn more</p>

Research and data

Research and data are necessary for growing the body of evidence needed to effectively and strategically implement programs, training, and policies to improve the quality and access of healthcare for pregnant people. Research to identify new targets and strategies for improving birth outcomes will help with the development of new programs and interventions for preventing preterm and low birthweight babies, as well as preventing poor maternal health outcomes. Other types of research and data strategies may involve

modeling and mapping techniques to identify the best communities and locations to implement programs and policies. For a list of Research and Data Solutions, proposed by members of M-BAN, see [Appendix C](#).

For example:

Type	Solution/Program	Overview
Research and data	Maternity care deserts report	<p>March of Dimes’ Nowhere to Go: Maternity Care Deserts Across the U.S. (2022 Report) and Where You Live Matters: Maternity Care Deserts and the Crisis of Access and Equity (2023 Report) highlight the urgent need to improve access to care across the country. The reports include the most comprehensive analysis of its kind looking at maternity care access, examining data beyond maternity care deserts, and other key issues impacting access to care and maternal health outcomes. Of note, the most recent reports show the decline in care access that has occurred over the last four years. The most recent 2023 report includes stories from families who live in maternity care deserts and their experiences.</p> <p>Learn more</p>
	The Pregnancy Risk Assessment Monitoring System (PRAMS)	<p>PRAMS, a surveillance project of the CDC and state health departments, aims to collect “site-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy,” and covers approximately 81% of US births. Forty-six states, the District of Columbia, New York City, Northern Mariana Islands, and Puerto Rico participate in PRAMS. The PRAMS questionnaire consists of both mandatory (core) and optional (standard) questions. PRAMS provides data not available from other sources. PRAMS data are used by researchers to investigate emerging issues in the field of reproductive health and by state, territory, and local governments to plan and review programs and policies aimed at reducing health problems among moms and babies. PRAMS data can be incorporated into public health decision making or translated in a variety of ways to improve quality and access issues. Researchers can request the PRAMS Analytic Research File for studies that involve multiple sites through a CDC Proposal.</p> <p>Learn more</p>

Tools and resources

Maternal Data Center (MDC)

The Maternal Data Center (MDC) is an online web tool that generates near real-time data and performance metrics on maternity care services for hospital participants. Hospitals submit patient discharge data—data that they already collect—to the MDC, which instantaneously links the discharge data to birth certificate or clinical data. The result is a low-burden tool that gives clinicians the perinatal performance metrics and benchmarking data they need to drive quality improvement.

California Maternal Quality Care Collaborative (CMQCC)

The CMQCC site houses the MDC (see above) and is committed to ending preventable morbidity, mortality, and racial disparities in California maternity care. The CMQCC site has a wealth of resources, toolkits, data, and research that can be accessed by anyone looking to advance equity in maternal health.

AMCHP Innovation Hub

AMCHP Innovation Hub is an online platform that provides maternal and child health (MCH) professionals and advocates with resources and tools to explore, build, and share effective work grounded in evidence that contributes to improving the health and well-being of MCH populations and their communities. It's home to the MCH Innovations Database, a searchable repository of “what's working” in the maternal and child health field (also known as practice-based evidence) that includes both practices and policies.

Every Mother Counts

To advance improvements in maternal health, Every Mother Counts collaborates with key decision-makers, thought and practice leaders, and community members. We focus our work on top priority maternal health issues to advocate for policy and system change on multiple levels. Every Mother Counts provides resources for learning as well as toolkits for advocacy.

Black Mamas Matter Alliance

Black Mamas Matter Alliance (BMMA) is a national Black women-led cross-sectoral alliance. BMMA supports Black mamas to advocate, drive research, build power, and shift culture for Black maternal health, rights, and justice. The vision of the alliance is to see a world where Black moms have the rights, respect, and resources to thrive before, during, and after pregnancy. The alliance provides learning opportunities, policy recommendations and support, research, and resources.

The Joint Commission

The Joint Commission works to continuously improve healthcare for the public, in collaboration with other stakeholders, by evaluating healthcare organizations and inspiring them to excel in providing safe and effective care of the highest quality and value. Its vision is that all people always experience the safest, highest quality, best-value healthcare across all settings. The Joint Commission provides accreditation, certification, tools, and resources for healthcare professionals, and interactive education. You can find free resources like webinars, newsletters, and reports as well as exclusive resources for Joint Commission “customers.”

Centers for Medicare & Medicaid Services (CMS)

CMS serves the public as a trusted partner dedicated to advancing health equity and expanding coverage to improve health outcomes. The Center for Medicare & Medicaid Innovation Center supports the development and testing of innovative healthcare payment and service delivery models. You can also learn about recent Medicare and Medicaid updates, regulation and guidance, research and data systems, and resources for outreach and education.

Media and publications

Where You Live Matters: Maternity Care Deserts and the Crisis of Access and Equity

This is a set of 52 comprehensive reports examining maternity care deserts and other factors that impact access to care, health outcomes, and unique barriers for all families in each state, the District of Columbia, and Puerto Rico. Created by March of Dimes to add to the compendium of data and research following their 2018, 2020, and 2022 national maternity care desert reports.

Getting Doulas Paid Policy Brief

Policy brief created in collaboration by HealthConnect One, SisterWeb, BirthMatters, Accompany Doula Care, and Ancient Song to provide a clear definition of services offered by and the role of community-based doulas. It also provides key considerations for doula Medicaid reimbursement that are unique to doula care.

How this Medicaid extension throws postpartum parents a lifeline

PBS News Hour article by Laura Santhanam

Medicaid Expansion Led To Reductions In Postpartum Hospitalizations

Article from Health Affairs written by Maria W. Steenland and Laura R. Wherry that outlines reductions in postpartum hospitalizations associated with Medicaid expansions.

Medicaid Expansion Led To Reductions In Postpartum Hospitalizations

A review by the Maternal Health Task Force of best practices for state legislation.

Strategy: Promote environmental justice

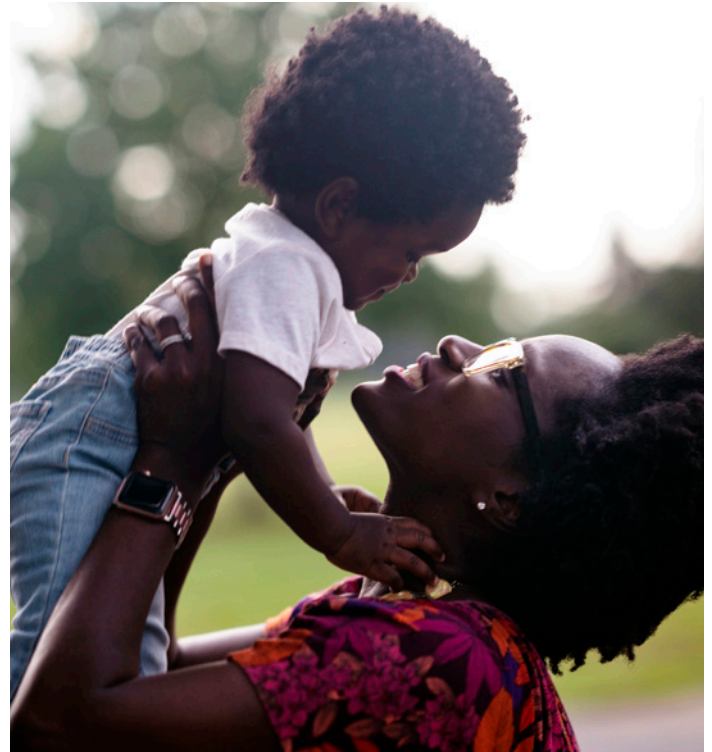


Strategy overview

Systemic racism has had significant impacts on environmental health practices and outcomes in the United States. Racially segregated communities often experience the damaging health impacts of environmental injustices including higher exposure to heat, air pollution, climate related weather events, and toxic chemicals. Environmental injustices and pollution segregation continue to plague many major cities in the US and impact low income, predominately Black neighborhoods at higher rates compared to higher income and white neighborhoods. Examples of these injustices can be seen in recent environmental disasters like the 2019 Philadelphia Energy Solutions refinery explosion located in the predominately Black community of Grays Ferry, or the 2014 Flint, Michigan city drinking water crisis.

The Flint water crisis is a clear representation of the history of segregation, ignoring the concerns of Black residents which ultimately resulted in devastating long-term health impacts.

Environmental justice seeks to reduce inequitable environmental burdens experienced by people of color, women, indigenous communities, and those living in economically disadvantaged areas. This will be achieved when all individuals have the same level of protection from environmental and health hazards as well as equal access to be involved in the decision-making process to create a healthy environment where they live, work and play. Environmental justice recognizes that pervasive racism has contributed to the inequitable exposures to environmental threats leading to inequitable maternal and infant health outcomes. Applying a reproductive justice lens to the environmental justice work ensures the inclusion of the right to bear and raise children in healthy environments by advancing shared goals and promoting the empowerment of the most-burdened pregnant people and communities as part of the solutions.



As vulnerable populations, women and infants experience disproportionate impacts of environmental threats. A recent study examining over 32 million birth records in the US found that pregnant people exposed to high temperatures or air pollution are more likely to give birth preterm or to underweight or stillborn babies. Furthermore, Black moms experienced these poor birth outcomes at much higher rates compared to the population at large. (Bekkar B, 2020) A Nature Climate Change article predicts that without climate intervention, by the end of the century 42,000 additional infants will be born preterm annually because of higher ambient temperatures. (Barreca, 2020)

Pregnant individuals are often excluded from conversations and decision-making when addressing environmental exposures and the climate crisis, but current research unequivocally shows that environmental injustices have a strong negative health

effect on pregnant people and their babies. No matter how the data is parsed—by race, neighborhood, socioeconomic status, exposures, etc.—BIPOC women and infants bear the heaviest burden of these injustices. Involvement in the environmental justice movement is crucial to a healthier tomorrow for all pregnant people and their babies.

Research and data snapshot

Foundational research has shown that environmental factors play an integral role in the health of pregnant people and their babies. A 2007 review concluded that factors such as heavy metal exposure, air pollution, and workplace dangers (pesticide workers, chemicals, radiation) can all contribute to adverse outcomes such as low birthweight, intrauterine growth restriction as well as long term brain development effects. (Triche, 2007) Additional studies have shown that environmental threats are especially dangerous for both pregnant people and infants during the perinatal period. For example:

- Several studies have shown the effect of increased air pollution on rates of eclampsia, pre-eclampsia (Koman, 2018), preterm birth (PTB), low birthweight, and stillbirth. (Western States PEHSU, 2022)
- A growing body of epidemiology links exposure to extreme heat with poorer health for pregnant people and to adverse birth outcomes, most notably hypertensive disorders of pregnancy (Chérie Part, 2022), preterm birth, low birthweight, and stillbirth. (Bekkar B, 2020)
- Studies have shown an association between climate-related disasters and impacts on maternal mental health, early pregnancy loss, birth defects, low birthweight, preterm birth, and placental abruption. (Harville, 2010)
- Several studies have linked phthalate exposure during pregnancy to low birthweight and preterm birth. (Zota, 2017)

The history of segregation, redlining, and other policies and practices rooted in racism have had a direct impact on the environmental health threats that Black, brown, and low-income communities face today. Recent studies have demonstrated that marginalized communities are experiencing the most immediate and worst impacts of climate change due to environmental inequality, exploitation, and unequal

policy infrastructure. Women, infants, and children in frontline communities bear the brunt of these risky conditions. (Watts, 2019) For example:

- In the US, people of color live in areas with a higher surface urban heat island (SUHI) intensity when compared to non-Hispanic White people in all but six of the 175 largest urban areas and 71% of 1,056 US counties experience land surface temperatures 4 degrees Celsius warmer in communities with higher rates of poverty when compared to the richest neighborhoods during summer months and the same was true for minority communities compared to non-Hispanic, White neighborhoods—even when controlling for income. (Hsu, 2021)
- The growing frequency and severity of climate change related disasters has had an inequitable impact on frontline communities, often low-income and Black and brown communities. Recent research has provided evidence showing that long-standing structural racism has led to increased vulnerability of lower income and racially and ethnically marginalized individuals to exposures to climate related disasters. (Smith, 2022)
- Personal care and beauty products such as hair straighteners, skin lighteners, feminine hygiene products, lotions, perfumes, and deodorants can contain phthalates, lead, and other harmful chemicals. A study exploring the environmental injustice of beauty found that women of color have higher levels of beauty product-related environmental chemicals in their bodies compared to White women, even when adjusting for economic status. (Zota, 2017)



Solutions overview

The need for deep innovation, increased attention, and an intersectional approach to the issues of birth equity and environmental justice is of vital importance. Black and Indigenous women and infants disproportionately bear the impact of both birth and environmental inequities. An intersectional approach recognizes that systems of oppression operate simultaneously and must be addressed simultaneously. Approaching birth equity efforts through an environmental justice lens in organizing, movement building, and community care can lead to more powerful outcomes at all levels. The following solutions provide an example of how collaborative efforts, policy, communications, data, and research can be advanced to increase environmental health equity especially for pregnant people and their families.

National, state, and place-based initiatives

National, state, and place-based initiatives and programs play a vital role in engaging the breadth of cross-sector stakeholders vital to advancing environmental justice solutions. These efforts help focus resources and efforts of numerous likeminded

organizations and individuals to achieve significant improvements that no single organization can accomplish on its own. Initiatives give stakeholders a focus with clear objectives and an opportunity for collaborative strategic thinking. When it comes to environmental justice, an emerging set of national and place-based initiatives and programs have already shown success and provide examples that others can learn from, engage with, and amplify. Initiatives at all levels should include communities and individuals with lived experience as strategic partners when developing policy, program, and other solutions. Additionally, many organizations in the examples below have developed public resources, trainings, and recommendations that can be leveraged to minimize duplicative work by individuals and organizations advancing environmental justice issues.

For example:

Type	Solution/Program	Overview
National initiative	Black Millennials for Flint	<p>Black Millennials for Flint (BM4F) is a national environmental justice and civil rights organization with the purpose to convene like-minded organizations to collectively act and advocate against the crisis of lead exposure specifically in African American and Latinx communities throughout the nation. BM4F has grown from its roots in providing clean and fresh water to prioritizing the need to address air pollution, food, consumer products, water, and housing. BM4F provides training and development, community outreach, advocacy, and resources. For example:</p> <ul style="list-style-type: none">• Training and Development including advocacy, coalition building, curriculum development, youth leadership, and development.• Lead Prevention App – developed for and piloted in Washington, DC• Environmental Justice Griot Project – robust leadership communications initiative to center the voices of African American, Indigenous, and Latinx American Gen Z and Millennials surrounding the climate crisis and energy sustainability.• The Black + Brown Alliance collaboratively develops virtual, on-demand content that is specific to maternal (childbirth) health, reproductive health, and mental health at the intersection of environmental justice. The alliance gathers monthly content via social media streaming services Facebook and YouTube which is available both live and on-demand. <p>National initiatives like BM4F provides a blueprint for how organizations can work at the national level, but also provide immediate and critical support for local communities facing environmental health emergencies.</p> <p>Learn more</p>

Type	Solution/Program	Overview
National initiative	Moms Clean Air Force	<p>Moms Clean Air Force is a community of over a million parents united against air pollution, climate change, and toxic chemicals while addressing environmental justice. Through a national network of state-based community organizers they advocate on local and national policy issues, meeting with lawmakers to build support for equitable, just solutions to pollution. Moms Clean Air Force has 27 chapters in 26 states and the District of Columbia.</p> <p>The Moms Clean Air Force website offers extensive resources regarding the impact of air pollution on pregnancy including fact sheets, videos, articles, petitions, and action guides. Their breadth of work includes programs such as:</p> <ul style="list-style-type: none"> • Justice in Every Breath – Equitable solutions to addressing air pollution and climate change. • EcoMadres – Latinx moms collaborating on issues of clean air, climate, and toxics that affect the health of Latinx children and families. Created in partnership with GreenLatinos, this program includes a broad cross-section of Latinx organizations engaging and empowering members to have conversations with lawmakers about the environmental threats to children's health. • Community Health Equity – Climate campaign dedicated to advocacy in frontline communities taking a stand against environmental discrimination and holding legislators accountable for lack of resources, educating communities on their rights and their issues. • FaithForce – Faith-based advocacy program working with faith-based organizations and meeting people where they live. <p>Learn more</p>
	Nurturely	<p>Nurturely promotes equity in perinatal wellness and strengthens cultures of support for infants and caregivers through preventative knowledge-sharing, collaborative exploration, and proactive community engagement. Nurturely's Enviro-Natal program is uplifting the need for education and advocacy at the intersection of perinatal health equity and climate justice. The organization conducts and supports research to explore perinatal solutions to equitable health for moms and babies.</p> <p>Nurturely is a great example of an organization that has infused environmental justice into their perinatal equity work, helping close the gap between healthcare and environmental health. Some examples of their work include:</p> <ul style="list-style-type: none"> • Annual Enviro-Natal Health Equity Symposium bringing together professionals from the intersection of pregnancy postpartum, and infant health and environmental/ climate justice. • Summer Learning Series with Beyond Toxics, covering toxin exposure during pregnancy and lactation as a climate resilience strategy. • Antiracism learning workshop for providers and community health workers. • Addressing barriers to lactation access through their Milk Magic Educator program, webinar learning and supporting rural lactation support. <p>Learn more</p>
	GreenLatinos	<p>GreenLatinos is an active and robust community of Latinx leaders united to demand equity, dismantle racism, and secure political, economic, cultural, and environmental liberation. GreenLatinos coordinates policy working groups with its members to provide education and coordinate advocacy efforts that positively impact national policy on climate justice and clean air, public land and ocean, sustainable communities, water equity, and place-based initiatives in Colorado.</p> <p>GreenLatinos provides a blueprint for collaboration and impact that celebrates and keeps Latinx community culture at the center of their work.</p> <p>Learn more</p>

Type	Solution/Program	Overview
National initiative	The National Association of Nurse Practitioners in Women's Health (NPWH) – Nurses Improving the Environmental Health of Women & Children	<p>Nurses Improving the Environmental Health of Women & Children (NIEHWC) is a collaborative focused on promoting women's, children's, and maternal health by reducing environmental factors that contribute to health disparities and harm. This collective effort aims to bring attention, resources, and support for environmental health interventions that eliminate disparities, improve health outcomes for women and children, and promote health equity, through leveraging nursing knowledge and the development and implementation of equitable policy, research, education, and practice change. NIEHWC leverages the knowledge and expertise of members and partners to:</p> <ul style="list-style-type: none"> • Identify key environmental issues affecting women's and maternal-child health. • Close the gaps in knowledge and consider opportunities for curriculum components for nurses and patients. • Identify policy solutions and create an action plan and timeline for execution. <p>The NIEHWC demonstrates how environmental justice issues can be tackled from the clinician/provider perspective.</p> <p>Learn more</p>
State, place-based initiative	Alaska Community Action on Toxics (ACAT)	<p>Alaska Community Action on Toxics (ACAT) is a statewide environmental health and justice organization established in 1997. Driven by a core belief in environmental justice, ACAT empowers communities to eliminate exposure to environmental toxins through collaborative research, shared science, education, organizing, and advocacy. They help communities implement effective strategies to limit their exposure to toxic substances and to protect and restore the ecosystems that sustain them and their way of life. They work to eliminate the production and release of harmful chemicals by industry and military sources, ensure the public's right-to-know, achieve policies based on the precautionary principle, and support the rights of Indigenous peoples through advocacy, education, and research. For example:</p> <ul style="list-style-type: none"> • Alaska Rural Environmental Justice Program – Community-Based Participatory Research Projects, Protecting Future Generations. • Environmental Health Policy and Social Change Program – Working to promote broad public support to implement local, national, and international policies to protect the health of people, wildlife, and environment from environmental contaminants. • Environmental Health Education Program – Works to inform clinicians, teachers, environmentalists, and other professionals about the link between pollutants and human health and the environment. • Alaska Youth & Community Outreach Program – Works to inspire youth and general public to engage in environmental health issues and eliminate contaminants in their homes and communities. This includes gardening workshops, home detox workshops, and more. • Wellness and Healing Program – Facilitates physical and emotional healing from the effects of environmental contaminants. <p>At the state level – ACAT's approach across the spectrum of advocacy, education, and research provides other state level efforts an example for planning their own initiatives.</p> <p>Learn more</p>

Type	Solution/Program	Overview
State, place-based initiative	WE ACT for Environmental Justice	<p>WE ACT was started in 1988 when three fearless community leaders saw that environmental racism was rampant in their West Harlem neighborhood, and they demanded community-driven, political change. WE ACT envisions a community that has informed and engaged residents who participate fully in decision-making on key issues that impact their health and community, strong and equal environmental protections, and increased environmental health through community-based participatory research and evidence-based campaigns. Although the focus of their work is on North Manhattan, WE ACT supports and advances legislation at the city, state, and federal level to further support efforts that can impact their community. Areas of work include climate justice, clean air, healthy homes, sustainable and equitable land use, and safe personal care products. For example:</p> <ul style="list-style-type: none"> • Beauty Inside Out Campaign tackles the toxicity of personal care products with a series of community briefings, webinars, research projects, and legislative advocacy efforts. • Lead Service Lines Campaign addresses toxic lead found in underground pipes as a part of a coalition with other stakeholders to develop a Lead Service Line replacement inventory tool. Hub cities will engage community organizations to work and educate the community about the health concerns with LSLs and engage with decision makers. This is a project funded by GOOGLE and BlueConduit. • NYCHA Health Homes Campaign organizes residents to mobilize and raise awareness of the health inequities they face and develop leaders who can advocate on behalf of the NYCHA community to ensure that protecting public housing and improving environmental living conditions is a top priority for legislators. • NYC Cooling Center program where the city opens spaces for the public to seek air conditioning on heat emergency days. Sites include public libraries, community centers, senior centers, and more. <p>Learn more</p>
	Black Women for Wellness (BWW)	<p>Black Women for Wellness began as a group of women concerned with the health and wellbeing of Black babies. They teamed up with the Birthing Project to implement the Shangazi Program—a grass roots program that matched women to mentors who coached parents from pregnancy until one year postpartum. Within four years of implementation, BWW began moving upstream to address systems and policy in California. Their environmental justice program, Perfectly Natural, is an environmental health and justice project that generates and publishes community driven research by working with beauty professionals, hair stylists and nail technicians and studying the impact of chemical use on health status. Examples of this work include:</p> <ul style="list-style-type: none"> • Healthy Hair Initiative <ul style="list-style-type: none"> • Beauty Professionals Behind the Chair – Research and reports addressing health risks to hair care professionals. • Curls & Conversations – Consumers, hair care professionals, and advocates discuss openly about the Black beauty industry. • Natural Evolutions – Report compilation of the work of BWW to provide insights into the culture, conversations and research surrounding Black women's hair, the beauty industry, and the subsequent effect on Black women's health. • Toxic Beauty Additives Advocacy, Education, and Studies • Report Exposed Ingredients in Salon Products & Salon Worker Health and Safety <p>Learn more</p>

Policy and systems solutions

Policy and systems changes are integral in institutionalizing and enforcing action to reduce environmental injustices. For example, rental and property sales must also be required to disclose and appropriately educate on toxic levels, potential exposures, and potential health outcomes. In addition, we must pass laws which require industry/private development and production to occur at a safe distance from residential housing to ensure human safety and distance from toxic exposures. This can be achieved by following the EPA smart growth toolkit.

Air pollution and emissions could be limited through enforcement of sanctions and fines to hold companies and people accountable for pollution. Additionally, we also must work to address remediation, redirection, redevelopment, etc. when housing and traffic or industrial contaminants are intertwined. The recent passage of the Pregnant Workers Fairness Act is an example of a policy solution that addresses systems level change. For a list of Policy and System Change Solutions proposed by members of M-BAN, see [Appendix D](#).

For example:

Type	Solution/Program	Overview
Policy and systems	Pregnant Workers Fairness Act	<p>The PWFA became law on June 27, 2023, and gives workers the right to receive reasonable accommodations, such as light duty, breaks, a stool to sit one, for pregnancy, childbirth recovery, and related medical conditions. The law includes lactation unless it would be an undue hardship on the employer. Employees are also protected from retaliation under the law. Widely supported by bipartisan legislators and organization, this is a great example of how policy can positively impact pregnant people.</p> <p>A Better Balance provides information and resources to learn more about the law and associated protections and provisions. Next steps for organizations are to ensure the law is being carried out and that individuals are aware of their lawful protections.</p> <p>Learn more</p>
	Momnibus: Protecting Moms and Babies Against Climate Change Act	<p>Protecting Moms and Babies Against Climate Change Act (H.R.957), one of the bills included in the Momnibus is a policy solution that can be supported and advocated for by those wishing to advance environmental justice.</p> <p>This bill will establish grants and direct other activities to address health risks associated with climate change, particularly for members of racial and ethnic minority groups, pregnant or postpartum individuals, and children younger than age three. For example:</p> <ul style="list-style-type: none"> • Invest in community-based programs to identify and address climate change-related maternal and infant health risks, especially in communities of color. • Provide funding to health professional schools to protect vulnerable moms and babies from climate change risks. • Establish a National Institutes of Health (NIH) consortium to advance research on climate change and birth. • Develop a comprehensive strategy to identify and designate climate change risk zones for vulnerable moms and babies. <p>Learn more</p>
	Environmental Justice for All Act	<p>The Environmental Justice for All Act is comprehensive EJ legislation that would apply a cumulative impact approach to federal decision-making that increases community engagement and allows for disproportionate environmental burdens to be tried as Civil Rights violations. Among other important provisions, the Environmental Justice for All Act will:</p> <ul style="list-style-type: none"> • Require consideration of cumulative impacts of pollution. Federal agencies will need to consider the cumulative impacts of pollution in a given area when making permitting decisions under the Clean Water Act or Clean Air Act. No permit will be issued if the project cannot demonstrate a reasonable certainty of no harm to human health after consideration of cumulative impacts. • Amend the Civil Rights Act of 1964. The Supreme Court decision in <i>Alexander v. Sandoval</i> will be overturned so that private citizens, residents, and organizations may legally challenge discrimination—including environmental discrimination—prohibited under Title VI of the Civil Rights Act of 1964. • Strengthen the National Environmental Policy Act (NEPA). Federal agencies will be required to provide early and meaningful community input opportunities under NEPA when proposing an action affecting an environmental justice community. Agencies will also be required to ensure robust tribal representation throughout the NEPA process for an activity that could impact a tribe, including activities impacting off-reservation lands and sacred sites. <p>This legislation has over 100 co-sponsors and is supported by over 300 organizations.</p> <p>Learn more</p>

Type	Solution/Program	Overview
Policy and systems	Justice40 Initiative	<p>This is an initiative of the Federal Government that 40% of the overall benefits of certain Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. President Biden made this historic commitment when he signed Executive Order 14008. Categories of investments under this initiative include:</p> <ul style="list-style-type: none"> • climate change • clean energy and energy efficiency • clean transit • affordable and sustainable housing • training and workforce development • remediation and reduction of legacy pollution • development of critical clean water and wastewater infrastructure <p>Hundreds of federal programs across the government are being transformed, and through the Inflation Reduction Act, Bipartisan Infrastructure Law, and the American Rescue Plan these agencies are making historic levels of investments to advance environmental justice. Investments are being made through grants, financing, staffing, and direct spending.</p> <p>Organizations and initiatives working to advance the intersection of Reproductive and Environmental Justice have provided input and continue to work on ensuring these investments are also including pregnant people in planning and implementation of the effort. Several agencies are providing technical assistance, informational sessions, and resources for organizations interested in accessing funds provided by this initiative.</p> <p>Learn more</p>
	Modernization of Cosmetics Regulation Act of 2022 and the Safer Beauty Bill Package	<p>The Modernization of Cosmetics Regulation Act of 2022 (MoCRA) is the most significant expansion of FDA's authority to regulate cosmetics since the Federal Food, Drug, and Cosmetic (FD&C) Act was passed in 1938. This new law will help ensure the safety of cosmetic products many consumers use daily. The legislation makes many constructive and long-overdue changes to the Federal Food, Drug and Cosmetics Act, which has not been significantly amended since it was enacted over 80 years ago, including:</p> <ul style="list-style-type: none"> • Requiring formal FDA registration of cosmetic facilities, products, and ingredients • Establishing good manufacturing practices • Requiring serious adverse event reporting • Requiring companies, for the first time, to disclose their use of specific fragrance and flavor ingredients to the FDA • Requiring the public disclosure of the ingredients in professional salon products as well as the disclosure of fragrance allergens • Creating standardized testing for asbestos contamination in talc • Giving the FDA the urgent authority it needs to recall cosmetic products that are harming human health <p>Although this shows great progress, it also prohibits states from legislating on cosmetic safety which impacts their ability to protect the health of their residents. Continued support of the Safer Beauty Bill Package is necessary to make beauty and personal-care products safer for all by banning the 11 most toxic chemicals to human health, defending the health of women of color and salon workers, revealing fragrance and flavor ingredients, and forcing supply chain transparency to cosmetic companies can create safer products. This package includes 4 bills:</p> <ul style="list-style-type: none"> • Toxic-Free Beauty Act • Cosmetic Fragrance and Flavor Ingredient Right to Know Act • Cosmetic Safety for Communities of Color and Professional Salon Workers Act • Cosmetic Supply Chain Transparency Act <p>Learn more</p>

Communications and training

Communications and training solutions are effective ways to build awareness and the foundation of knowledge for consumers, providers, and advocates advancing environmental justice at every level from community to national. For example, awareness campaigns about available resources for pregnant people during disasters can ensure individuals are better protected and prepared for a disaster and

mitigate potential health impacts. Additionally, training providers and community birth workers on the potential environmental health threats in their communities can give them the foundation of knowledge to share with their patients and community members. To see a list of Communications and Training solutions proposed by members of M-BAN, see [Appendix D](#).

For example:

Type	Solution/Program	Overview
Communications and training	Miami-Dade Women's Fund: Heat Awareness Campaign	<p>The Women's Fund Miami-Dade broke new ground in the summer of 2021 by erecting a billboard in central Miami warning of the impact of heat on the health of pregnant people. The project was accomplished through a collaborative effort that engaged city-wide cross-sector stakeholders and investors.</p> <p>This billboard is the first of its kind: A public health awareness effort by an NGO focused on extreme heat and dangers to maternal health. The billboard was designed to raise public awareness, but also provide information on a website where pregnant people and families can access information on "What they should know & What they can do" during heat waves and when suffering from extreme heat.</p> <p>This is a great example of an effort that can be replicated in other cities as a solution to combat the negative impacts of extreme heat on pregnancy health, but also to utilize for other environmental health awareness.</p> <p>Learn more</p>
	Environmental Justice Boot Camp: Theory and Methods to Study Environmental Health Disparities	<p>Launched in 2021 – The Environmental Bootcamp is co-hosted by the Harvard Chan-NIEHS (National Institute of Environmental Health Sciences) Center for Environmental Health as well as affiliated NIEHS centers at the Columbia Mailman School of Public Health and the University of California San Francisco.</p> <p>The boot camp is aimed at investigators at all stages of their careers and is taught by experts in environmental health, sociology, epidemiology, health policy, biostatistics, and community engagement. It covers topics such as how to design studies that effectively evaluate environmental health disparities and how to maximize the impact of the research. The course also includes case studies and meet-and-greets with environmental justice experts.</p> <p>Key learnings of the workshop training include the following:</p> <ul style="list-style-type: none">• Key concepts of environmental justice and health disparities• Epidemiologic conceptual framework• Study design advantages and challenges• Data collection, questionnaire design, and measurement error• Data analysis: basics of interaction and mediation• Emerging topics and methods in environmental justice research <p>Workshops are scheduled throughout the year. Interested individuals can sign up for updates, apply for scholarships and more.</p> <p>Learn more</p>

Data and research solutions

Data and research are necessary for growing the body of evidence needed to effectively and strategically research pregnancy-related topics and continue growing our understanding of the complex biological pathways between environmental exposures and birth outcomes. Furthermore, the research can and should be utilized as a tool for policy advancement. As the diversity of research conducted grows, significant

findings must be implemented rapidly to ensure the best outcome for vulnerable populations. Taking action to reduce climate change can help to reduce adverse health outcomes for pregnant people and their babies. Investment in data and research has the potential to decrease future healthcare expenditure significantly. For a list of Data and Research solutions proposed by members of M-BAN, see [Appendix D](#).

Type	Solution/Program	Overview
Data and research	American Forests: Tree Equity Program	<p>Trees in cities provide health, employment, and climate resiliency benefits. They help provide basic needs, like fresh air and clean drinking water. Trees also cool neighborhoods, which reduces heat-related illnesses and utility costs, and generate wealth by creating tree-related career opportunities. Much like buildings, streets, and sewer lines, trees are critical infrastructure that improve our quality of life. But a map of tree coverage in America's cities is too often a map of income and race. Due to decades of redlining and other discriminatory policies, trees are often sparse in neighborhoods with more low-income families and people of color. Studies show that the neighborhoods that were historically redlined have fewer trees, preventing the people living there from reaping the benefits that trees provide.</p> <p>In 2021 American Forests created a map that provides a Tree Equity Score. This tool calculates a score for all 150,000 neighborhoods and 486 municipalities in urbanized areas across the continental US. More than 70% of the US population lives in these urban places. This mapping tool provides essential data for planning solutions to mitigate and reduce the effect of heat islands.</p> <p>To achieve full Tree Equity, they have set a goal to grow 522 million trees across urbanized America. There are three major goals to achieve by 2030 including:</p> <ul style="list-style-type: none"> • 100 US cities achieve Tree Equity by ensuring every neighborhood has a passing tree equity score. • 100,000 people, many from marginalized communities, have newly entered careers in forestry. • Create heat-resilient communities in urban America by planning and maintaining trees in the neighborhoods that need them most. • <p>Some examples of the successful work being done across the US include the following projects:</p> <ul style="list-style-type: none"> • Detroit – Converting underutilized land into accessible green space. • Baltimore – Establishing the Baltimore City Community Forestry Corps, a pre-apprenticeship program related to urban forestry. • Boston – Developing a plan to create and maintain a thriving, sustainable urban forest. • Phoenix – Addressing extreme heat by advancing Tree Equity throughout Maricopa County. <p>Those interested in tackling tree equity in your communities, cities, and states can start by accessing the mapping tool to understand current needs and opportunities for implementing similar programs to those listed above.</p> <p>Learn more</p>
	ChemFORWARD	<p>ChemFORWARD works to turn chemical data into positive impact by improving access to chemical hazard data and illuminating safer alternatives. Work is focused on ending toxic chemical exposure and advancing human and environmental equity with safer chemistry. ChemFORWARD provides access to data and research, and offers benchmarking and reporting to help achieve measureable progress toward safer chemistry. Their research initiatives include a comprehensive beauty and personal care initiative focused on ingredient evaluation and selection that is backed by the best available science and research.</p> <p>Learn more</p>

Type	Solution/Program	Overview
Data and research	White House Council on Environmental Quality (CEQ) – Climate and Economic Justice Screening Tool (CEJST)	<p>In November 2022, Version 1.0 of the CEJST was launched in an effort to provide data to support the implementation of the Justice40 Initiative (see above Policy solutions). The tool is meant to help ensure that the benefits of federal programs are reaching communities that are overburdened by pollution and historic underinvestment. The tool uses datasets as indicators of burdens. The burdens are organized into categories.</p> <p>A community is highlighted as disadvantaged on the CEJST map if it is in a census tract that is (1) at or above the threshold for one or more environmental, climate, or other burdens, and (2) at or above the threshold for an associated socioeconomic burden. In addition, a census tract that is completely surrounded by disadvantaged communities and is at or above the 50% percentile for low income is also considered disadvantaged.</p> <p>Prior to the 1.0 version launch, M-BAN and partners advocated for the addition of maternal and infant health indicators into the tool—however, the required data sets were not accessible for inclusion. Further advocacy and support to add maternal and infant health indicators in tools like this one is essential for advancing environmental justice for pregnant people and their families.</p> <p>Learn more</p>

Resources and tools

Environmental Protection Agency's Office of Environmental Justice in Action (OEJ)

For over 25 years, efforts of the OEJ have focused on decreasing environmental burdens, increasing environmental benefits, and working collaboratively to build healthy, sustainable communities. OEJ provides financial and technical assistance to communities working to address environmental justice issues. The Office also works with local, state, and federal governments; tribal governments; community organizations; business and industry; and academia, to establish partnerships seeking to achieve protection from environmental and health hazards for all people regardless of race, color, national origin, or income. To accomplish this mission, OEJ has implemented programs and funding opportunities helping communities and organizations to build capacity; to better engage federal agencies to help them understand environmental justice issues; to incorporate the voices of communities into agency decisions; and to provide tools and resources for promoting the principles of environmental justice. These include the following tools and resources:

- **EJSCREEN** – Environmental Justice mapping and screening tool that is publicly available, so stakeholders understand how EJ is considered in EPA's work as well as make informed decisions and create a common foundation for discussions with partners and consumers. The tool is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. This tool has yet to include maternal and infant health indicators but is a start to building a foundational understanding of EJ across the US.
- **Training and Technical Assistance** – OEJ trains and coordinates workshops for both internal and external stakeholders on issues related to EJ and equitable development. Additionally, communities can enhance their ability to be involved in decision making and advancing environmental protection through the Technical Assistance Services for Communities (TASC) program.
- **Funding** – OEJ works directly with communities to implement solutions addressing local environmental and health concerns through two funding streams: the Environmental Justice Small Grants Program and the Collaborative Problem-Solving Agreement Program

California Safe Cosmetics Program (CSCP) Product Database

Publicly available repository of over 123,000 products' ingredients from over 900 companies resulting from the passage of The Cosmetic Fragrance and Flavor Ingredient Right to Know Act (CFFIRKA), signed into law in 2020. For all cosmetics sold in California, these laws require the manufacturer, packer, and/or distributor named on the product label to report to the California Department of Public Health (CDPH) all cosmetics that contain any ingredients known or suspected to cause harm, as described in authoritative lists specified in these laws.

The Climate Resilience for Frontline Clinics Toolkit

The Center for Climate, Health, and the Global Environment at Harvard T.H. Chan School of Public Health and AmeriCares collaborated on a three-year effort to create the Climate Resilience for Frontline Clinics Toolkit which provides useful resources for healthcare providers, patients, and administrators at free clinics and community health centers to meet the challenges for healthcare from climate change.

In the Eye of the Storm: A People's Guide to Transforming Crisis & Advancing Equity in the Disaster Continuum

A toolkit developed by the NAACP to guide NAACP units and their Environmental and Climate Justice Committees through the process of building equity into the four phases of emergency management: prevention and mitigation, preparedness and resilience building, response and relief, and recovery and redevelopment. Each module of the toolkit can stand-alone, and some communities might find that certain modules are more relevant to their community's needs than others. It's a useful tool for any group engaging in emergency management through an equity-based lens.

CDC – Tracking Dashboards and data resources

1. [Environmental Justice Dashboard](#)
 2. [Heat & Health Tracker](#)
 3. [The Environmental Public Health Tracking Network](#)
 4. [Environmental Justice Resource Inventory](#)
 5. [Surveillance and Data Resources](#)
-

Mapping for Environmental Justice

MEJ's maps display the environmental, public health, and socioeconomic disparities communities experience, enabling advocates and policy makers to identify disproportionately impacted areas.

Building EJ Tool

Compiled list and links to tools and data sources related to Environmental Justice and more.

EcoAmerica – Climate for Health™

Founded by ecoAmerica, Climate for Health™ offers tools, resources, and communications to demonstrate visible climate leadership, inspiring and empowering health leaders to speak about, act on, and advocate for climate solutions.

Moms Clean Air Force Resource Library

A resource library to understand the health impacts of air pollution and climate change. The goal is to educate parents. Materials are vetted by top scientists and public health experts.

Media and publications

Climate Change and Pregnancy: Guidance from the Western States Pediatric Environmental Health Specialty Unit

Guidance on climate change and pregnancy including health risk overview, recommendations for clinicians, recommendations for patients and communities, and policy considerations.

The New School: Tishman Environment and Design Center - Local Policies for Environmental Justice: A National Scan

A report giving a comprehensive overview of recent environmental justice policy efforts in cities, counties, and utilities across the US. The report provides a look at the types of policies and provide practical models for other city and state efforts to address environmental justice.

The Influence of Environmental Toxicity, Inequity and Capitalism on Reproductive Health

A report from the Center for Biological Diversity that provides an extensive overview of the impacts of fossil fuels, plastics, industrial agriculture, and climate change on reproductive health. The report includes recommendations to advance improvements.

The Link between Climate Change and Sexual and Reproductive Health and Rights

An evidence review by Women Deliver demonstrating the link between climate change and sexual and reproductive health. The review includes opportunities for address gaps in available evidence and recommendations to drive action at the intersection of climate change and reproductive health.

5 Ways To Improve Maternal Health by Addressing the Climate Crisis

A report from the Center for American Progress providing policy solution to improve maternal health in the midst of the current climate crisis.

Red Hill Fuel Leak: Oahu, Hawaii Video

The Red Hill Bulk Fuel Storage Facility in Hawaii has a history of leaking fuel into the environment since 1947. The most recent leak occurred in November 2021, when a mixture of water and fuel was released from a drain line. The leak sickened fence line families who relied on a nearby well for their water. A CDC survey revealed that 87% of people who took the survey experienced new or worsening health symptoms including nausea, skin rashes, fatigue, and headaches. Families were displaced from their homes and experience both health and economic hardship as a result of the fuel leak. The fuel spill also forced the shutdown of several water sources operated by the Honolulu Board of Water Supply that provided drinking water for urban Honolulu.

Watch: Smells Like: A Documentary Outlining Community Health Impacts from Industrial Air Pollution in Houston, Texas

Persistent air pollution in Harris County, Texas is an example of environmental injustice with marginalized communities experiencing the burden of exposure. Watch this documentary to learn more about the historical injustice and the reproductive health impacts on the community.

“For decades, residents of Harris County, Texas, have endured life-threatening air pollution from oil refineries and petrochemical plants. This short documentary portrays the neighborhoods that border oil refineries and a determined activist, Juan Flores, who fights for clean air for his community.”

Explore the Richmond Listening Project

Learn about how the people living in the City of Richmond are experiencing environmental threats such as air pollution from fossil fuel operations. The project was developed to learn and better understand the needs of the community.

Strategy: Advance economic opportunity throughout the life course



Strategy overview

Dismantling barriers to economic opportunity and disrupting the burden of persistent poverty inflicted on some groups more than others is foundational to achieving a more just and thriving society. From slavery, to redlining and gentrification, to the whole uprooting of native peoples from their very land, to documented unjust hiring and promotion practices, mass incarceration, formal and informal segregation in schools—the work at hand is abundant with urgent opportunity for aligned action and bountiful impact. The promise of addressing poverty becomes even more impactful when economic justice efforts adopt the lens of birth equity and when birth equity efforts adopt a lens of economic justice. This includes being clear that the people most oppressed by poverty are those most persistently on the receiving end of racism, classism, and gender oppression, and who also experience the heartbreaking tragedy of infant and maternal mortality and morbidity more than others.

Advancing economic opportunity for all individuals and their families allows our communities to grow with a strong and equitable foundation, where people's most basic needs are met and where the conditions that support their ability to accumulate wealth, experience sustained economic security, and reach their full potential are in place.

Research and data

Social drivers of health (SDOH) are the conditions in which people are born, grow, live, work, and age. They include factors like socioeconomic status, education, neighborhood and physical environment, employment and working conditions, social support networks, as well as access to quality healthcare. Health outcomes are largely influenced by these conditions, which in the US have been shaped by intergenerational and historical inequities stemming from centuries of marginalization and discriminatory practices disproportionately impacting formerly enslaved and indigenous people. (Centers for Disease Control and Prevention, 2022)



In 2022, more than half a million Americans experienced homelessness and of these, 30% were families with children. (The U.S. Department of Housing and Urban Development, 2022) Additionally, 4% of women in the US experienced homelessness during the 12 months prior to pregnancy. According to National Alliance to End Homelessness: “Most minority groups in the United States experience homelessness at higher rates than Whites, and therefore make up a disproportionate share of the homeless population.

African Americans make up 13% of the general population, but more than 40% of the homeless population. Similarly, American Indians/Alaska Natives, Native Hawaiians and Pacific Islanders, and people who identify as two or more races make up a disproportionate share of the homeless population. Hispanics make up a share of the homeless population approximately equal to their share of the general population, while Whites and Asians are significantly underrepresented.” (National Alliance to End Homelessness, 2020)

Poverty and maternal and infant health outcomes are intimately linked. In the US in 2019, 1 in 7 children lived in poverty (United States Census Bureau, 2019), and 42% of the near four million births were to moms utilizing Medicaid for their health insurance, with some states demonstrating greater percentages. (National Vital Statistics System, 2021) Research going back decades has linked poverty with poor child outcomes, including low birthweight, psychosocial issues, malnutrition, and low educational attainment. (Council on Community Pediatrics, 2016) (Chaudry, 2016) (Gultekin LE, 2020)

Homelessness during pregnancy is associated with lower access and utilization of prenatal care services, as well as an increased rate of obesity, hypertension, depression, illicit drug use, smoking, stress, and diabetes, all of which can threaten a woman's lifelong health status, as well as her pregnancy and birth outcomes. (Clark, 2019)

Inextricably linked with poverty is housing instability, which ranges from challenges paying for one's housing to inadequate housing and chronic homelessness.

Housing instability has also been associated with higher odds of preterm birth, low birthweight, hypertensive disorders of pregnancy, hemorrhage in pregnancy, and other obstetrical complications, as well as higher rates of emergency room visits and hospital readmission within three months and one year postpartum. (Clark, 2019) (Pantell, 2019)

Poverty unto itself is often cyclical within families, exacerbated by a number of SDOH factors including access to resources, educational attainment, exposure to racism and discrimination, immigrant status, and health. The impact of poverty on pregnancy outcomes and the health of children is also closely tied to the other four strategy areas in the National Equity Framework: racism and unequal treatment, environmental factors, safe and connected communities, and access to quality healthcare. This interconnectedness is deepened by the systemic inequities in the US, which are exacerbated by the presence of fewer social safety nets compared to other high-income nations.

Over 40% of US households are struggling to make ends meet and are frequently experiencing difficulties in covering their most basic needs, despite being employed and above the traditional (and inadequately defined) Federal Poverty Limit. (United Way of Northern New Jersey, 2023)



Solutions overview

Social safety net programs administered by local and state agencies, healthcare systems, and community-based organizations are critical to ensuring that immediate financial needs are addressed for families receiving trauma-responsive services during acute moments of crisis. However, a comprehensive approach to sustainably improving maternal infant health and erasing the preventable disparities that continue to persist in the US should also include efforts to prevent and mitigate chronic stressors, including exposure to lifelong economic insecurity.

The implementation of programs and policies that support and accelerate intergenerational wealth building and long-term economic wellbeing can benefit all segments of the population and are particularly beneficial for members of communities that have been

persistently harmed by discriminatory policies and practices. The following strategy overview is laid out to provide examples of programs and policies that have been implemented across the US thus far and can serve as a starting point for readers interested in learning more. For a full table of solutions proposed by M-BAN members and partners, see [Appendix E](#).

Baby bonds

Baby bonds are trust accounts funded by the government and provided to newborns as a means to ensure that all young adults have access to some level of financial means to pursue an education, purchase a home, or other asset-building activity, without having to rely on substantial debt. As such, baby bonds have been conceptualized as a vehicle towards achieving more equitable socio-economic conditions for all US residents, and particularly benefiting those most impacted by historical injustices and unjust systems.

To maintain fidelity towards the original intent of the baby bond concept as a tool to reduce racial wealth inequality and improve community wellbeing, state and local proposals should include these essential elements:

- Children receive a substantial endowment.
- The timing of the funding of the baby bond accounts may vary.
- Children from lower-resource households receive higher amounts.
- Enrollment is automatic.

- Funds are restricted to wealth-generating assets.
- Baby bonds are structured with an emphasis on publicly-funded endowments.
- The program has a sustainable funding source.
- Baby bond investments are excluded from state benefits’ asset limits.

Evaluation of baby bond programs should include indicators related to maternal and infant health, spanning a multi-generational period to adequately capture the impact of stabilizing economic security for moms and their families.

A guide for states and cities to utilize with an overview of these elements and concepts has been developed by Prosperity Now.



For example:

Type	Solution/Program	Overview
Baby bonds examples	Federal	<p>The American Opportunity Accounts Act was introduced by Senator Cory Booker and Representative Ayanna Pressley in 2021. In this particular proposal, “each of the approximately four million children born in the US annually would receive an American Opportunity Account—an investment account managed by the Treasury Department—that would be seeded with \$1,000. Every year until children turn 18, they would receive automatic, progressively distributed annual deposits of up to \$2,000, with children from the lowest-income households receiving the maximum amount. By the time they turn 18, young adults from the lowest-income households would have as much as \$34,000 invested in their accounts. With the estimated returns on that investment, the balance could total more than \$45,000. Beginning at age 18, young adults could use these funds to invest in wealth-building assets, such as higher education, starting a small business or homeownership.” (Markoff, 2022)</p> <p>Learn more</p>

Type	Solution/Program	Overview
Baby bonds examples	Connecticut	<p>The Connecticut Baby Bonds initiative was passed into law effective July 1, 2021, and was modeled after a concept initially proposed by economists Derrick Hamilton and William “Sandy” Darity. Through this program, managed by the CT Office of the State’s Treasurer, every baby born in the state to a mom covered by Medicaid (aka Husky) will automatically receive a one-time investment of up to \$3,200. The investment principal, managed by the State’s Treasurer, is estimated to grow at an annual rate of return of 6.9% and will be accessible to each beneficiary once they reach the age of 18. The funds remain available until an individual’s 30th birthday, and upon completion of an approved financial literacy course. Participants will be able to file a claim to draw upon this money for one of four purposes:</p> <ol style="list-style-type: none"> 1. to start and/or invest in a Connecticut business 2. to pay for higher education 3. to buy a home in Connecticut 4. to fund retirement savings <p>Baby bond claims will not be considered an asset to be counted against benefits eligibility and the proceeds will not be taxed by the state. The state’s yearly total investment of \$50 million dollars to benefit approximately 15,600 babies each year, was intentionally conceived as a racial equity, anti-generational poverty, economic growth, and wealth building vehicle to help level the playing field for families and individuals impacted by historical barriers to intergenerational wealth-building opportunities.</p> <p>Learn more</p>
	District of Columbia	<p>The D.C. Council voted in late 2021 to approve the Child Wealth Building Emergency Act of 2021. The legislation makes it so any child born in D.C. on or after October 1, 2021, to a family enrolled in Medicaid and making less than 300% of the federal poverty line will be enrolled in a Child Trust Fund. Children whose families live at or under the federal poverty line—which is \$26,500 per year for a household of four—will receive an initial \$500 deposit in that account, followed by annual deposits capped at \$1,000. A four-person household earning no more than \$79,500 a year would get the same initial \$500 starting deposit but then \$600 per year for each eligible child. The children will keep receiving the deposits provided they remain in the city and under the income thresholds. Once they turn 18, they’ll gain access to the trust fund—but will only be able to use it to for the following activities:</p> <ol style="list-style-type: none"> 1. pay for education 2. buy a house or commercial property 3. start a business 4. invest in stocks, bonds, or shares <p>If any child becomes ineligible because of income, the annual deposits will stop, but they will still have access to the money once they turn 18.</p> <p>Learn more</p>
Other child investment examples	California	<p>California has passed two child investment programs to build generational wealth and combat the racial and economic inequities.</p> <p>The first—the Hope, Opportunity, Perseverance, and Empowerment (HOPE) for Children Trust Account Program—similar to baby bonds, will benefit children who lost a parent to COVID and kids who are in the state’s foster care system for 18 months or longer. The HOPE program will give a yet to be decided on amount to children. Learn more</p> <p>The second, the CalKIDS program launched August 2022, invests between \$500 to \$1500 in a college savings account—up to \$1,500 for 3.4 million school-age children and babies born after July 1, 2022. Learn more</p>

Unconditional cash programs

Sometimes referred to as Guaranteed Basic Income or Universal Basic Income, these programs provide hundreds or thousands of dollars a month to participants. These direct cash benefit programs provide people with money regardless of their employment status to support their basic needs. These programs are designed to provide relief from poverty that is not rooted in the bureaucracy of current social assistance programs. Existing research shows that “Guaranteed income gives recipients more freedom, dignity and self-determination to make choices for their financial well-being and have been found to improve health, education, and child welfare outcomes.” Participants receiving GBI payments will still be eligible to receive other existing social safety net services and waivers will be put in place to ensure that they don’t

become disqualified from eligibility. Also of note, are efforts led by community-based organizations and other local partners that specifically focus on pregnant people and new parents. The examples below include foundational pilots providing the evidence for other efforts.

“Cash improves birth outcomes for low income families significantly”

**Dr. Zea Malawa, Expecting Justice:
Abundant Birth Project**

For example:

Type	Solution/Program	Overview
Unconditional cash programs / Guaranteed basic income	Stockton Economic Empowerment Demonstration (SEED)	<p>The Stockton Economic Empowerment Demonstration (SEED) was the first mayor-led guaranteed income initiative in the US. Through SEED, 125 Stockton residents received \$500 per month for 24 months. The cash payments were unconditional and could be used by participants as they wished, with no strings attached and no work requirements. To qualify, participants needed to be at least 18 years old and live in a Stockton neighborhood with a median income at or below \$46,033, which is the city’s median income. There were no criteria related to individuals’ own income as the priority level of intervention was focused on the neighborhood level.</p> <p>Administered as a Randomized Controlled Trial (RTC) this pilot program was evaluated by researchers at the University of Tennessee and the University of Pennsylvania. Preliminary evaluation findings covering the pre-COVID period from February 2019 to February 2020, were released in early 2021. These findings showed statistically significant improvements in a number of indicators of interest, including:</p> <ul style="list-style-type: none">• decreases in anxiety and depression over time and compared to the control group.• improved energy over fatigue and overall emotional wellbeing.• increased capacity for goal setting and coping with unexpected setbacks.• higher rates of employment shifts from part-time to full-time status compared to the control group. <p>(Cultivate Strategies, 2021)</p> <p>Learn more</p> <p>Inspired by the SEED project in Stockton, mayors across the country have come together to advance the implementation of guaranteed basic income (GBI) programs and set out to launch a series of pilots. See below for example pilots, and this link to learn more about Mayors for a Guaranteed Income.</p> <p>Learn more</p>
	Alexandria Recurring Income for Success and Equity (ARISE)	<p>ARISE, in the City of Alexandria (VA), is a Guaranteed Income Pilot (GIP) where 170 randomly selected low-income households will receive \$500 per month for two years, with no strings attached. This investment of \$3 million will be allocated from the American Rescue Plan Act (ARPA) funding and will be rigorously evaluated to inform future opportunities for expansion of the program.</p> <p>Learn more</p>

Type	Solution/Program	Overview
Unconditional cash programs / Guaranteed basic income	Expecting Justice: Abundant Birth Project	<p>Expecting Justice: Abundant Birth Project, which was primarily privately funded and used design thinking, actively engaged paid community members (\$100/hr) to conceptualize, design, and implement a GBI program focused on dismantling and disrupting the burden of economic racism impacting Black and Pacific Islander moms. Both of these groups have been prioritized because they experience higher rates of adverse birth outcomes and can benefit from birth equity approaches that include improved access to economic resources without strings attached. While it was important to also include allied stakeholders and system experts in the project design process, it was determined early on that measures needed to be put in place to mitigate power differentials in the room. Therefore, participating Black and Pacific Islander moms' votes carried twice the weight when voting on key project decisions.</p> <p>To be eligible to participate in this program and receive a monthly cash supplement of \$1,000 up to six months postpartum, Black and Pacific Islander moms would need to earn less than \$100,000 annually.</p> <p>According to Dr. Zea Malawa, who serves as a key lead on the Expecting Justice: Abundant Birth Project, a similar program implemented in Manitoba, Canada observed a reduction in preterm birth rates of 16.5%, which is a far greater impact than most traditional medical interventions designed to prevent preterm birth. (Enns, 2021) Learn more</p>
	The Bridge Project	<p>Launched in 2021 by The Monarch Foundation, The Bridge Project provides a basic cash amount ranging from \$500 to \$1,000 distributed on a bi-weekly basis to new moms living in select neighborhoods in New York City for up to three years. The project is founded in the belief that cash is an easy solution to provide low-income families a way to take care of basic needs, minimize barriers, and maximize impact on improving intergenerational poverty and resulting health outcomes. The project currently serves 600 families.</p> <p>A portion of the program is a randomized control trial in partnership with the University of Pennsylvania's Center for Guaranteed Income Research. The goal is to expand to reach 1,100 babies and moms by the end of 2023. Learn more</p>
	California Department of Social Services Program	<p>In the fiscal year 2021-2022, the California Governor and legislature agreed on a \$35 million investment over the course of five years to support guaranteed income pilot programs that prioritize young adults aging out of the foster care system, as well as pregnant people. As a result, the California Department of Social Services (CDSS) has launched a program that will award grant funds to entities charged with administering guaranteed income pilot programs in both rural and urban settings across the state.</p> <p>As with other GBI programs implemented elsewhere, CDSS realized the potential effect that GBI could have on eligibility for other social safety net benefits received by participants, potentially nullifying or severely limiting its intended positive effects. Therefore, CDSS has instituted a process to help prevent and mitigate potential negative impacts by implementing a process for reviewing demonstration project income exemption requests from California counties, cities, and other local municipalities seeking to reduce poverty by administering guaranteed income pilots and projects in their jurisdictions. If an income exemption request is granted, recipients of guaranteed income who are also receiving CalWORKs benefits can avoid any negative impacts on CalWORKs participant eligibility and benefits. Learn more</p>
	The Nest	<p>Seattle's Perigee Fund launched The Nest, a no-strings-attached GBI program in 2022. The goal of the initiative is to strengthen families' economic stability and improve maternal and child health outcomes and will focus on families starting in pregnancy and extending through the child's third birthday. The program, which will be delivered by Hummingbird Indigenous Doula and Family Services, will be the first of its kind to center Native American/American Indian, Alaska Native, Pacific Islander, and Native Hawaiian pregnant people. This effort is partly fueled by the findings from the Baby's First Years study, which demonstrates the positive influence that GBI programs can have on children's brain development.</p> <p>Over the next six years, The Nest will give up to 150 families \$1250 no-strings-attached monthly payments until their child's third birthday which equates to up to \$45,000 for a family participating from the birth of their child until they turn three. Eligibility includes:</p> <ul style="list-style-type: none"> • Twelve weeks pregnant to six weeks postpartum and planning to parent • Indigenous to North America or Pacific Islander • Living in King or Pierce County or the Tulalip Reservation located in Snohomish County • Meet income limitations Learn more

Type	Solution/Program	Overview
Unconditional cash programs / Guaranteed basic income	Magnolia Mother's Trust	<p>While the devastating impacts of Covid-19 disproportionately affected people with less resources, low-wage workers, and communities of color, Black moms participating in the Magnolia Mother's Trust program in Jackson (MS) were able to experience increased economic stability thanks to the monthly no-strings-attached \$1,000 they received during the course of one year. Evaluation results documented increased access to reliable transportation, as well as increased ability of moms to pay their bills on time (from 27% to 83%), increased savings dedicated to emergencies (from 40% to 88%), and increased ability to have enough money to pay for food (from 64% to 81%). Additionally, the proportion of moms who were able to attain health insurance coverage increased by 25% and more moms were able to consult medical providers in case of illness (from 40% to 70%). Participating moms also reported being able to be more selective with their employment options, allowing them to prioritize jobs with more flexible working hours to accommodate family schedules and caregiving responsibilities, ultimately preserving their participation in the labor force during a time when too many moms had to make the difficult decision to drop out of the labor force altogether so that they could tend to their children's remote schooling and childcare needs.</p> <p>There have been 4 cohorts totaling 320 moms. Learn more</p>

"[...] we already know cash helps poor people be less poor. That is common sense. Instead, we're building a movement—empowering Black women and unapologetically positioning them as worthy, capable, and valuable. Beyond the tangible financial benefits, this program has highlighted the invaluable effects of economic security: being able to sleep at night, knowing your kids will have food on the table and a few gifts under the Christmas tree, and dreaming of a job you're passionate about and brings you joy and satisfaction."

Springboard to Opportunities

Housing stabilization

Housing is a key socioeconomic factor that can have a significant impact on a person's health and wellbeing and is often inextricably linked to low income and persistent financial constraints, serving as a significant chronic stressor for many individuals and families. While permanent/long-term and supportive housing programs have gained a foothold to help ensure that people with complex chronic health needs have the resources needed to manage their conditions more consistently and reliably, few programs have been developed to support people of reproductive ages and their families as a preventive measure to optimize birth outcomes and family wellbeing.



For example:

Type	Solution/Program	Overview
Housing stabilization	Healthy Start in Housing (HSiH)	<p>The Boston-based Healthy Start in Housing (HSiH) initiative was born in 2011 out of a cross-sector partnership between the Boston Public Health Commission and the Boston Housing Authority. HSiH was a first-of-its-kind program focused on supportive housing as a means to improve birth outcomes. Through HSiH, unhoused pregnant people with medical conditions or health history that posed them at higher risk for adverse birth outcomes, received priority access to affordable housing units, along with intensive case management services provided by local Healthy Start program staff. Program staff assist with housing applications, interview preparation, education about tenant rights and budgeting. The goals include ensuring program enrollees have the tools and knowledge necessary to succeed as lease-holding tenants.</p> <p>This partnership has resulted in:</p> <ul style="list-style-type: none"> • A shortened waiting time between referral and housing placement from up to five years to an average of nine months. • Stabilizing housing for moms and moms-to-be at a much faster rate compared to the general unhoused population. • After one year in the program, preliminary evaluation findings showed that the proportion of participating moms reporting clinically significant depressive symptoms declined by 20%. (Allen, 2014) <p>Learn more</p>
	Healthy Beginnings at Home (HBAH)	<p>Built as a randomized controlled trial launched in 2018 and concluded in early 2021, Healthy Beginnings at Home (HBAH) is a pilot project that recruited a total of 100 families, of which 49 were randomly assigned to receive rental assistance and other supportive services including landlord mediation, financial assistance, healthcare coordination, and person-centered planning and motivational interviewing.</p> <p>The study was funded by several public and private organizations, including the Ohio Housing Finance Agency and the CareSource Foundation, and was purposefully located in Franklin County (OH) as a measure to reduce the stark racial disparities in infant mortality impacting Black families in the area. While the sample size was not large enough to document statistically significant results, initial outcomes related to reductions in:</p> <ul style="list-style-type: none"> • preterm birth • self-reported maternal outcomes • Medicaid healthcare expenses <p>These initial outcomes were promising, strengthening the evidence base for rental assistance and housing stabilization efforts prioritizing pregnant and parenting families, and warranting additional investments in larger efforts.</p> <p>In 2021, this public-philanthropic partnership was recognized by the US Department of Housing and Urban Development (HUD) Secretary Marcia Fudge, as one of six notable examples of public-philanthropic partnerships that included “locally-driven outcomes, lasting impact in the community, evidence-based innovation, and transferability to other geographies and sectors.”</p> <p>In 2022, Ohio Governor DeWine announced a \$2.25 million investment to expand this effort to serve more pregnant women living in two high housing cost-burdened counties.</p> <p>Other communities interested in replicating this effort, can access the HBAH Replication Template here.</p> <p>Learn more</p>

For example:

Type	Solution/Program	Overview
Federal policy	Earned Income Tax Credit (EITC)	<p>Earned Income Tax Credit (EITC) can help low- and moderate-income workers keep a greater proportion of their earned income by owing less taxes and potentially receiving a larger tax refund each year. EITC participation has shown to be correlated with improved maternal mental health and pregnancy outcomes, including longer gestational age and reductions in low birthweight rates. Benefits persist in the early childhood period with demonstrated improved nutrition and educational attainment.</p> <p>While these improvements are experienced across all racial and ethnic groups, the benefits are larger in states with more generous EITC programs. Regardless, Black moms tend to experience higher rates of improved birth outcomes, making EITC expansion an effective policy tool that can contribute to bridging persistent racial disparities in birth outcomes. (Komro, 2019)</p> <p>As of the time of this writing, only the federal government, 30 states, Puerto Rico, Guam, the District of Columbia, and some municipalities have EITC programs in place and an estimated 20% of eligible workers do not claim EITC.</p> <p>In addition to expanding state based EITC, targeted partnerships and programs that aim to reduce barriers to filing tax returns, such as lack of awareness and lack of preparation support, can significantly increase access to EITC for participants who can stand to benefit the most.</p> <ul style="list-style-type: none"> • Every year, the Internal Revenue Service (IRS) partners with organizations nationwide to increase awareness and improve participation rates. Organizations serving pregnant and parenting families, and those working towards strengthening economic security as a means to increase equitable birth outcomes, can seek out this and other opportunities to increase EITC participation rates in their respective geographies. Access resources • In partnership with the Department of Consumer and Business Affairs, First 5 LA, CAL EITC and the United Way, the Los Angeles African American Infant and Maternal Mortality (AAIMM) has created a public awareness campaign and are providing a limited number of Black families who are eligible for EITC, with free tax preparation assistance from certified tax professionals. Learn more
	Paid Family and Medical Leave	<p>The US is the only industrialized country that does not offer paid family and medical leave as a national benefit. The Family and Medical Leave Act (FMLA) of 1993 requires private employers with at least 50 employees and all government agencies to offer 12 weeks of leave for childbirth, adoption, or serious illness of oneself or close relative. However, while FMLA provides for job protection during these 12 weeks, it does not require wage replacement, leading to significant financial burden for most Americans. Because of how it is currently structured, less than 60% of US workers are eligible for FMLA, and far too many cannot afford to take it, exacerbating persistent disparities that disproportionately impact low- and medium-wage workers and their families.</p> <p>Only approximately 17% of civilian workers have access to some form of paid leave through employer-based and/or state-based wage replacement programs, with larger employers (more than 500 employees) offering the most paid leave benefits compared to smaller employers (less than 50 employees). (March of Dimes 2018) Paid family and medical leave programs already exist in California, Connecticut, New Jersey, Rhode Island, Washington, New York, and D.C., and bills have been introduced in other states.</p> <p>The benefits of paid medical and family leave are multi-fold:</p> <p>For the health of new moms and babies:</p> <ul style="list-style-type: none"> • Better birth outcomes and improved infant mortality rates • Allows for the increased duration of breastfeeding, which improves the health of both moms and babies and lowers the risks of infection for babies • An international evaluation of paid leave policies showed that for every increase of 10 weeks of paid maternity leave, there was a 10% lower neonatal and infant mortality rate and a 9% lower rate of mortality in children under age five, even after controlling for other known risk factors for infant and child death <p>For families caring for sick loved ones:</p> <ul style="list-style-type: none"> • Provides financial stability to those who need to care for an elderly or ill parent or child, or themselves • Allows for leave to be taken for military caregiving purposes

Type	Solution/Program	Overview
Federal policy	Paid Family and Medical Leave	<p>For the economy:</p> <ul style="list-style-type: none"> Increases the labor force participation of moms by 6% in the year of a birth Reduces birth-year maternal labor market detachment by 20% At five years, up to 50% fewer women leave their jobs Older caregivers who leave their job to take care of an elderly parent can experience income and benefit loss to the tune of \$303,880 (on average) over their lifetime <p>A Better Balance provides resources for advocates wishing to advance state and federal level paid family leave. Learn more</p>
	Pregnant Workers Fairness Act	<p>The Pregnant Workers Fairness Act (PWFA) is a new law, passed on June 27, 2023, that requires covered employers to provide “reasonable accommodations” to a worker’s know limitations related to pregnancy, childbirth, or related medical conditions, unless the accommodations would cause the employer an “undue hardship”. The PWFA does not replace the federal, state, or local laws in place that protect workers impacted. Currently, only two states have ONLY federal level law in place to provide accommodations for pregnant workers. Learn more</p>

“Most Americans will face the demands of having a baby, developing a serious illness or needing to care for a sick loved one at some point in their lives. In those cases, retaining some level of income can mean the difference between being able to maintain stability and financial independence, versus facing the challenges of having no income to support themselves and their loved ones. That is why March of Dimes has steadfastly advocated for a national paid family and medical leave program and new workplace accommodations through the Pregnant Workers Fairness Act enacted last year.”

Stacey Y. Brayboy
Sr. Vice President,
Public Policy & Government Affairs



Data and research solutions

Type	Solution/Program	Overview
Data and research	The Child Opportunity Index (COI)	<p>The Child Opportunity Index (COI) measures and maps the quality of resources and conditions that matter for children to develop in a healthy way in the neighborhoods where they live. The Index looks at 29 key factors that affect how children experience their neighborhoods in three domains:</p> <ul style="list-style-type: none"> • Education • Health and environment • Social and economic <p>Developed in 2014 by Diversity Data Kids in collaboration with the Kirwan Institute for the Study of Race and Ethnicity at Ohio State University, the COI has been widely used to spark conversations about unequal access to opportunity and to spur actions to increase equity.</p> <p>COI 2.0, launched in 2020, responds to users' requests for an updated index and includes new data and improved methods. While COI uses primarily census tract level data, new zip code level estimates were developed and made available in 2022.</p> <p>Learn more</p>
	The Prosperity Now Scorecard	<p>The Prosperity Now Scorecard is a comprehensive resource featuring data on family financial health and policy recommendations to help put all US households on a path to prosperity.</p> <p>The Scorecard equips advocates, policymakers, and practitioners with national, state, and local data to jump-start a conversation about solutions and policies that put households on stronger financial footing across five issue areas:</p> <ul style="list-style-type: none"> • Financial assets and income • Businesses and jobs • Homeownership and housing • Healthcare and education <p>The Scorecard assesses all states on their relative ability to provide opportunities for residents to build and retain financial stability and wealth. The Scorecard also ranks the states on racial disparities—the gaps in 26 outcome measures between White residents and residents of color—and factors this into a state's overall performance.</p> <p>Learn more</p>
	The Opportunity Atlas	<p>The Opportunity Atlas utilizes anonymous data following 20 million Americans from childhood to their mid-30s to understand which US neighborhoods, and associated conditions, offer children the best chance to rise out of poverty.</p> <p>Neighborhood characteristics measured and mapped at the census tract level through this resource include, among others:</p> <ul style="list-style-type: none"> • median rent • median household income • job growth rate • density of jobs <p>Through the Opportunity Atlas users can trace the roots of today's affluence and poverty back to the neighborhoods where people grew up. While ZIP code isn't destiny, it has too often limited people from reaching their full potential because of the inequitable conditions shaping different neighborhoods. By understanding how upward mobility opportunity varies within and across communities, these new data can help identify local solutions and investments to help more families rise out of poverty.</p> <p>Learn more</p>
	Social Vulnerability Index (SVI)	<p>A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in a disaster. These factors, known as social vulnerability, have been associated with adverse maternal and infant health, regardless of the presence of disasters, and may therefore be useful for any partner trying to better understand the extent and distribution of socio-economic factors impacting families in their communities.</p> <p>The CDC/ATSDR Social Vulnerability Index (SVI) uses US Census data to determine the social vulnerability of every census tract, ranking each tract on 15 social factors, including poverty, lack of vehicle access, and crowded housing. The tool groups these factors into four related themes and generates maps for each of the themes, as well as overall social vulnerability scores.</p> <p>Learn more</p>

Type	Solution/Program	Overview
Data and research	US Maternal Vulnerability Index (MVI)	<p>The US Maternal Vulnerability Index is an open-source tool that identifies where and why moms in the US are vulnerable to poor health outcomes. The state and county-level data depictions are based on 43 indicators associated with maternal health outcomes. These indicators are organized by themes including:</p> <ul style="list-style-type: none"> • socioeconomic determinants • physical environment • mental health and substance use • reproductive healthcare • general healthcare • physical health <p>The tool covers 50 US states and the District of Columbia. Learn more</p>
	United for ALICE	<p>ALICE is an acronym for Asset Limited, Income Constrained, Employed, and represents the growing number of families who, despite being employed and above the traditional Federal Poverty Level, are unable to make ends meet. As such, they experience difficulties affording the basics of housing, childcare, food, transportation, healthcare, and technology. Over 40% of US households fall within the ALICE category and are forced to make difficult trade-offs every day. At the time of this writing, 23 US states and the District of Columbia partner with United Way to track and report ALICE data in their respective geographies, stratified by counties and various demographic indicators. Learn more</p>

Tools and resources

Prosperity Now

Prosperity Now is an organization that works to build a just and fair economy that is free from structural racism. Their website provides numerous resources, toolkits, and data to support the advancement of economic opportunity.

Guaranteed Income Community of Practice (GICP)

The Guaranteed Income Community of Practice (GICP) convenes policy experts, advocates, researchers, leaders, funders, practitioners, and elected officials to learn and collaborate on unconditional cash programs. There are over 400 convening partners and over 250 organizations represented.

A Better Balance

A Better Balance is a national non-profit advocacy organization that offers legislative support, direct legal services, and public education when it comes to issues such as work-family policies and discrimination.

Pregnant@Work

Pregnant@Work is an online resource center providing tools and educational materials about pregnant and breastfeeding employees for care providers, employees, employers, and attorneys.

Family Values @ Work

Family Values @ Work is a network of grassroots organizers and coalitions working toward economic, racial, and gender justice.

Asset Funders Network (AFN)

AFN is the leading national grant maker membership organization focused on advancing equitable wealth building and economic mobility.

Publications and Media

Baby Bonds: A Universal Path to Ensure the Next Generation Has the Capital to Thrive

Report outlining Baby Bonds including data and history, opportunities, feasibility, and recommendations.

The Color of Law Book by Richard Rothstein

The Color of Law Book makes clear that it was the laws and policy decisions passed at the local, state, and federal level that have promoted the discriminatory patterns that persist today.

Guaranteed Income: States Lead the Way in Reimagining the Social Safety Net

A report from the Economic Security Project that provides an overview of why states should engage in guaranteed income, provides overviews of different models, and potential impacts.

Zero Weeks Documentary

Weaving powerful stories together with insightful interviews with leading policymakers, economists, researchers, and activists, ZERO WEEKS lays out a compelling argument for guaranteed paid leave for every American worker. The film looks at paid leave from an emotional, medical, financial, and global perspective.

Strategy: Build safe and connected communities



Strategy overview

Social drivers of health (SDOH) are the conditions in which people are born, grow, live, work, and age. They include factors like poverty and socioeconomic status, education, neighborhood, physical environment, employment, and social support networks, as well as access to healthcare. SDOH influence an individual's life and health in profound ways: poverty often limits access to safe neighborhoods, healthy foods, and good jobs. (Nagahawatte, 2008) Research shows that health outcomes are a direct result of these conditions and are often rooted in generational and historical inequities. (Artiga, 2018) Improving these conditions starts by looking at the community level for opportunities to engage and strengthen community connection and safety.

Investing in safe, connected, and supportive communities is integral to advancing equitable maternal and infant health outcomes and supporting families. Health outcomes are often poor in communities where residents must regularly deal with unstable housing, limited job opportunities, unreliable transportation, unsafe neighborhoods, and limited access to nutritious foods, or substandard education. (Centers for Disease Control and Prevention, 2022), (Office of Disease Prevention and Health Promotion, 2023) In addition to these social drivers, features of a community's built environment, such as access to safe parks, shopping plazas and recreation centers, as well as community institutions, such as clubs, parent-teacher groups, religious institutions and community leadership organizations, can serve to promote social integration in the community, which can in turn improve health. (Adler, 2002) While these investments in community and social infrastructure are typically seen as costs by decision-makers, they might also want to view them as benefits, as they can ultimately contribute to improved health in the community.



"Cherished Futures for Black Moms and Babies is structured as a two-year cohort experience where we bring together hospitals, public health departments, payers, Black women, and leaders to look at systemic change... I'll always go back to the importance of elevating the experiences and the voices of folks in community. In Cherish Futures we do that by hosting our sister circles and conversation and then elevating those recommendations and the thoughts to decision-makers that are in, hospitals in particular, because I think this sort of bidirectional learning and sharing right now doesn't really happen."

Dana Sherrod, Cherished Futures for Black Moms and Babies



To improve health equity, we must find ways to improve social connectedness, increase neighborhood opportunity, and build resilience, otherwise community members face social isolation which can put their health at risk. US Surgeon General, Dr. Vivek Murthy, has said that social isolation is a “deeply consequential” public health crisis. He further notes how “During my years caring for patients, the most common pathology I saw was not heart disease or diabetes; it was loneliness.” (Martin, 2020) One of the current priorities of US Surgeon General, Dr. Murthy is to improve health by addressing social isolation. Researchers have shown comparisons of the health risks of social isolation akin to those of smoking and obesity. Health risks include depression, impaired immunity, increased suicidal tendencies, and increased risk of death. Further, people who feel they do not belong due to their race, ethnicity, gender identity, sexual orientation, or religion are more susceptible to social isolation. Pregnancy can add another layer of social isolation and sense of belonging in a community, especially in the wake of COVID-19.

While all aspects of SDOH influence an individual’s health, building social connection and safety is paramount to equitable health outcomes. Historical discriminatory practices and policies, (redlining for example), have isolated entire neighborhoods resulting in a lack of resources, infrastructure, and investment. Historically redlined and segregated neighborhoods are often times also co-located with environmentally toxic industries and sites further exacerbating inequities in maternal health and birth outcomes. Reversing the impacts of these historical policies and practices requires stronger inclusive social policies that embed social well-being and connectedness into every facet of public policymaking and programming.

An integral part of developing strong community connectedness is the integration of community partnerships in the development of policies and solutions, especially when building connections to meet the healthcare needs of moms and pregnant people. The benefits of strong community connection and resilience reaches beyond pregnancy and birth, for families, community involvement in early childhood can help support children’s emotional, intellectual, and physical growth. Community involvement helps develop a foundation of belonging, awareness, and learning that empowers the individual to flourish. (Children’s Bureau, 2018)

“We run a couple of different, what we call, family councils throughout the state, where we really build relationships with different parents and families, to really understand their experience and the experience of the communities that they live in.”

Chinyere Okwu, EverThrive Illinois

Data and research snapshot

Researchers and policymakers typically define high-opportunity neighborhoods as those that have access to sustainable employment, high-performing schools, healthy environments, access to quality healthcare, adequate transportation, quality childcare, neighborhood safety, and institutions that facilitate civic and community engagement. Since it’s extremely difficult to characterize neighborhoods in such a comprehensive way, most studies define opportunity using other, more available, indicators, such as the neighborhood poverty rate. (Acevedo-Garcia, 2008) Residence in a federal poverty area captures numerous factors that reinforce and compound disadvantages in neighborhoods such as lack of access to quality schools, employment opportunities, and fresh healthy food; environmental hazards; and crime and safety concerns. Since these disadvantages often exist simultaneously in the same neighborhoods, neighborhood poverty is used to target policymaking and resource allocation at both the national and local levels. (Pearl, 2018) Evidence shows that neighborhood

opportunity, when measured by poverty, income, and deprivation, is associated with an increase in preterm birth. (Pearl, 2018) In particular, early life and sustained exposure to residential poverty is related to increased preterm birth risk, especially among Black women. Several bodies of research have found that neighborhood disadvantage at the time of delivery is associated with increased preterm birth even when family and personal socioeconomic circumstances exceed that of the neighborhood overall. (Pearl, 2018)

Community factors are also an important equity issue when addressing maternal and infant health, as highly segregated communities have significantly higher preterm birth rates compared to communities that are less segregated, even when controlling for factors such as neighborhood poverty, insurance coverage, and maternal medical conditions. (Salow, 2018) A study in Chicago showed that non-Hispanic Black women living in medium- and high- racially segregated neighborhoods with high levels of poverty (>20%) had increased odds of experiencing hypertensive disorders of pregnancy (HDP). (Mayne S. L., 2018) Another study in New York City revealed that neighborhood poverty and residential segregation also impact racial disparities in low birthweight for infants. (Grady, 2006) In a novel approach to assess maternal and infant health outcomes based on neighborhood physical disorder, a 2019 study using Google's street view imagery and nine indicators for physical disorder found that living in neighborhoods with high disorder was associated with a higher prevalence of preterm birth, small for gestational age (SGA) and HDP. (Mayne S. L., 2019) Additional research is needed to fully understand the link between physical neighborhood disorder and maternal health, however it reflects the "broken window theory" that visible signs of disorder encourage further disorder and lack of neighborhood safety.

Solutions overview

While the data and research above give an overview of how aspects of SDOH lead to increased disparities in maternal and infant health outcomes, additional research has shown the positive or protective SDOH factors linked to maternal health, these include: positive emotional connections and support; place-based resources (local amenities, quality healthcare, green spaces); and public policies and programs

(safe and adequate housing, nutritious foods, quality education, and financial support). (Wang, 2020) (Kwon, 2017) These examples provide a starting point for developing solutions to advance policies and programs that invest in strengthening communities to advance equitable maternal and infant health outcomes.

Solutions that reach across and coordinate with many difference sectors are necessary to build safe, connected, and supportive communities. Numerous facets of community life impact mom and baby health, including access to and community investment in health services; mental health and the burden of stress on women in the community; transportation systems; community infrastructure and revitalization; the availability and quality of community spaces; access to nutritious food; workforce development programs; and policing and law enforcement in the community. Potential solutions to address these many and diverse facets of community life and their impact on maternal and infant health are outlined below.

Policy and systems solutions

Policy and system changes are necessary to support improvements and changes at the local level in communities. For example, policies that include funding grant programs that support community revitalization projects would help alleviate the burden of cost on local municipalities, creating an easier path to improving a community's-built environment. Policy and system improvements work hand in hand to build safe and connected communities. For example, establishing and funding (through legislation) a partnership with CDC and USDA to provide grants to fund mobile farmers markets, bus stop markets, Coop-markets in food deserts with equitable pricing for fresh foods could help fill the gap in access to healthy and fresh foods that many communities experience. Many communities have members who suffer with untreated mental health disorders, it's important to address this concern with trained professionals when someone is in crisis rather than treating them as a criminal. Communities can address this concern by altering systems that lead to over-policing and dismantle the treatment of mental health issues as a criminal justice issue. For a list of Policy and System Solutions proposed by members of M-BAN, see [Appendix F](#).

Type	Solution/Program	Overview
	Food Security: New Roots Fresh Stop Markets – Louisville, KY	<p>New Roots is a nonprofit organization that seeks to ignite community power for fresh food access. Communities have the power to support local farmers to ensure they receive respectful treatment and fair compensation that they may not otherwise receive from large, profit-driven companies. Additionally, the food is fresh and grown locally reducing the need to go to markets stocked by large, industrial farms where practices may be questionable.</p> <p>Fresh Stop Markets are farm-fresh food markets located in neighborhoods that lack reliable access to fresh food in Metro Louisville. Markets run by volunteer leaders operate from the belief that fresh food is a basic human right.</p> <p>Participants in Fresh Stop Markets pay on an income-based sliding scale: \$6 if paying with SNAP; \$12 for those with limited resources; \$25 for those with higher incomes; and \$40 for those who would like to invest in the community and purchase a Food Justice Share.</p> <p>77% of shareholders pay the lower end of the sliding scale. All shareholders get the same share of local, seasonal, mostly organic produce no matter what they pay. In 2021, 715 families accessed fresh produce, 7,200 shares were sold, eight markets were open across Louisville and southern Indiana, and \$160,000 in revenue was earned by local farmers.</p> <p>New Roots provides an overview of how their model works and gives a framework for other organizations wishing to set up similar programs to improve access to fresh foods in their communities.</p> <p>Learn more</p>
Policy and systems	Healthcare quality and access: Community care hubs	<p>Community care hubs offer health systems access to regional and state networks of CBOs to provide a coordinated system of health and social care to equitably meet people's needs. These hubs act to:</p> <ul style="list-style-type: none"> • Coordinate funding from multiple private and public sources. • Leverage trusted relationships and existing resources. • Offer a single point of contracting for CBOs with healthcare systems. • Enable CBOs and communities to have a seat at the decision-making table with healthcare providers. • Coordinate community-based workforce development and training. <p>Hubs can improve coordination and continuity of care, data-sharing capabilities, and aspects of SDOH.</p> <p>For example: The Western NY Integrated Care Collaborative (WNYICC) is made up of over 30 CBOs serving community members in western and central NY. They partner with healthcare plans and providers to improve health. WNYICC also works with Medicaid managed care organizations (MCOs) and entities participating in the Global and Professional Direct Contracting Model to help connect beneficiaries with health-related social needs with social care providers participating in the Collaborative. Their programs include the following areas:</p> <ul style="list-style-type: none"> • Neighborhood and living environment: food as medicine programs, housing resources, transportation linkages, and legal linkages. • Health education: diabetes programs, self-management programs, community health coaching. • Community and social needs: social isolation and depression management program, fitness and social workshops, and care management/coordination. • Economic stability: coordination of resources, benefits counseling, and linkages to programs. • Healthcare access and quality: healthcare provider linkages, benefits counseling, and more. <p>Learn more</p>

Type	Solution/Program	Overview
Policy and systems	<p>Education: Partnerships to Create Community Hubs: Briya Public Charter School and Mary's Center – Washington, DC</p>	<p>Briya Public Charter School embraces a two-generation approach to education for young children and their parents in four low-income, predominantly immigrant neighborhoods in Washington, DC. While their children attend a high-quality early education program, parents acquire English language, parenting, and digital literacy skills. A workforce development program also provides parents with the opportunity to earn their high school diploma, or to become certified as a medical assistant or child development associate.</p> <p>Briya further advances the two-generation model through a strategic partnership with Mary's Center, a community health center that has been providing high-quality healthcare and social services to the DC community for over 30 years. Through this partnership, Briya and Mary's Center emphasize that this comprehensive approach to care—adult and early childhood education, healthcare, and social services—creates a model for social change. With all three elements in place, families are able to break the cycle of poverty and achieve positive long-term outcomes for all members of the family.</p> <p>Researchers from the Brookings Institution found that the combination of a school and clinic that function together as a “hub” to provide healthcare, social services and education shows promise as a way to help improve social mobility in low-income neighborhoods. (Butler, 2015) Looking specifically at Briya-Mary's Center, they found that early education students at Briya performed better on several key domains when compared to their peers in other DC traditional public and charter schools. Additionally, Mary's Center was in the top 25% of federally funded clinics nationwide. The available data suggest that Briya/Mary's Center is having a significant positive impact on the families it serves—through education, workforce development programs, access to high-quality health services, co-located social services, and more. Of note, 100% of adult learners who took the national Registered Medical Assistant Exam earned their credential.</p> <p>Researchers do caution that there are many challenges to hub models such as this, including obstacles to expanding their approach and the need to build capacity around data collection to carry out evaluations that are more rigorous. Learn more</p>
	<p>Education: California Community Schools Partnership Program (CCSPP)</p>	<p>The CCSPP supports schools' efforts to engage and partner with community organizations and local government to align resources and improve educational outcomes. Integrative approaches provide an opportunity to focus on more than just one dimension of education, but instead include a focus on a wide breadth of social services, health services, youth and community development, and community engagement.</p> <p>Community school strategies can help mitigate many of the potential impacts that various aspects of SDOH may have on education and health outcomes. There are four evidence-informed program features that are aligned with high-quality teaching and learning:</p> <ul style="list-style-type: none"> • Integrated support services • Family and community engagement • Collaborative leadership and practices for educators and administrators • Extended learning time and opportunities <p>In 2021, CA legislature passed the California Community Schools Partnership Act and in 2022 expanded the program with added funding through 2031.</p> <p>The CCSPP provides a framework to drive the design and implementation of their work. Learn more</p>

Type	Solution/Program	Overview
Policy and systems	Neighborhood Safety: Cure Violence Program	<p>Cure Violence is a prevention program that applies evidence-based public health epidemic-reversal strategies to:</p> <ul style="list-style-type: none"> • Detect and interrupt potentially violent situations. • Identify and change the thinking and behavior of the highest risk to engage in violence. • Change group norms that support and perpetuate the use of violence. <p>The program looks at where violence clusters are occurring and utilized culturally sensitive community health workers to interrupt and change community norms regarding the use of violence. Staff, with lived experience, are trained as community health workers and receive additional education on mediation, persuasion, behavior change, and norm change to bolster their knowledge. The program originated in Chicago as CeaseFire and has now been successfully implemented in several cities nationally and internationally. Data from 17 years of data showed that the CeaseFire program reduced shooting incidents 16-28% in four out of seven study locations. Qualitative interviews revealed that many of the CeaseFire “clients” felt they received significant help from the community staff and researchers deduced that the program had a positive influence on at-risk youth in the communities. (Ritter, 2009)</p> <p>Other examples:</p> <p>Cure Violence Atlanta implemented by CHRIS 180</p> <p>To mitigate the cumulative trauma and the direct effect on community development and civic participation, Cure Atlanta was launched in the Neighborhood Planning Unit V (NPU-V). The program staff are seen as trusted members of the community, making them more keenly aware about disagreements and violence bubbling up that law enforcement would not otherwise be aware of and mediate where needed.</p> <p>In Milwaukee the 414LIFE violence prevention initiative was launched in 2018. Utilizing the cure violence model, the initiative led to a decrease in homicides from 119 to 98 over the two-year period of initial implementation.</p> <p>Learn more</p>

Communication and training solutions

Communication and training are integral strategies for building a strong community that is safe, connected, and healthy. For example, implementing workforce-training programs at local community centers can help community members acquire career level positions in and around their community. Likewise, providing and creating safe spaces for community support groups and community education classes will help support community members in different areas including parenting, addiction recovery, and adult education. Health awareness campaigns that are informed by community members and delivered/communicated by trusted community leaders can increase uptake of the information. For a list of Communication and Training Solutions proposed by members of M-BAN, see [Appendix F](#).



Type	Solution/Program	Overview
Communications and training	Workforce training and development: Community-based birth worker/Healthcare worker training	<p>Community health workers (CHWs), community-based doulas, promotoras, lactation consultants, and other community-based support are present in the community and act as both support and trusted community resource for people through the perinatal continuum. Community-based birth workers can facilitate access to services, provide quality and culturally competent service delivery. They improve health outcomes, advance health equity, and can reduce healthcare costs overall by addressing SDOH in the support and care they provide.</p> <p>Examples of services include outreach, community education, informal counseling, social support, advocacy, translation/interpretation, healthcare navigation, and tracking of progress.</p> <p>Community-based birth workers and CHWs share cultural understanding, ethnicity, language, and life experiences with the community members they are serving. Data from a randomized control trial involved CHWs specifically, shows there is a \$2.47:1 return on investment for Medicaid payers. (Kangovi, 2020)</p> <p>Community-based doula training For over 30 years, HealthConnect One has worked in communities across the US to design peer-to-peer support programs which have achieved better birth outcomes while generating local jobs and leveraging community resources. HealthConnect One works with maternal and child health organizations, hospitals, community health centers, social service providers, birth workers, and grassroots organizers to create programs that focus on a specific community's needs. HealthConnect One's programs are deeply rooted in community and provide training to frontline staff so that moms have support during their pregnancy and can have support during labor and birth; families bond with their newborn and get support for breastfeeding and healthy food options; and children and caregivers have access to psychosocial supports, understand early learning and reduce stress in the home as much as possible.</p> <p>The community-based doula model emphasizes five essential components:</p> <ol style="list-style-type: none"> 1. Employ women who are trusted members of the target community. 2. Extend and intensify the role of the doula with families from early pregnancy through the first months postpartum. 3. Collaborate with community stakeholders and use a diverse team approach. 4. Facilitate experiential learning using popular education techniques and that the training curriculum. 5. Value the doulas' work with salary, supervision, and support. <p>Learn more</p> <p>Community Health Aide Program Alaska's Community Health Aide Program (CHA/P) was developed in response to the challenges that the state's vast size and spread-out population presented to healthcare access. The Alaska Tribal Health Systems (ATHS) Health Aide model was borne from the need to meet people in the remote and culturally distinct communities where they lived. The program training emerged in the 1960s giving way to the current CHA/P.</p> <p>CHA/Ps operate as part of regional teams to assess and provide emergent, acute, and chronic medical care. The success of the program has expanded to now include multiple health aide programs including the Dental Health Aide Program and the Behavioral Health Aide Program with a hub and spoke type of referral for services.</p> <p>There's a Community Health Aide Program Certification Board (CHAPCB) administered by Alaska Native Tribal Health Consortium. They have formalized a process for maintaining the training, practice standards, and policies.</p> <p>Learn more</p>

Research and data are not just necessary for identifying and prioritizing the communities that are in highest need for these support systems and policies, but also to better understand how aspects of SDOH are linked to various maternal and infant health outcomes. Research gaps that have been identified and could benefit from further exploration include sexual and gender identity status, nativity, income, employment status, marital status, mental health, and the interactions of these factors with race and ethnicity. Another example that could help guide future programs and systems to build strong foundations for safe and supported communities includes researching current practices and programs that successful communities are implementing. In addition, utilizing community level health data and mapping tools can help identify and prioritize funding and program implementation in communities. For a list of Research and Data Solutions, proposed by members of M-BAN, see [Appendix F](#).



Type	Solution/Program	Overview
Research and data	SmartSafe StreetScapes	<p>SmartSafe StreetScapes is a new research project in Charlotte, NC. Through the use of Artificial Intelligence (AI) and advanced technology the 36-month project will work with community residents to explore and co-design new intelligent policing technologies. SmartSafe StreetScapes is:</p> <ul style="list-style-type: none"> • Detecting behavior identified as suspicious without targeting individual identities. • Monitor pedestrian and vehicle movement. • Identify behaviors that could place personal safety at risk. <p>Researchers and residents will use pedestrian and vehicular traffic monitoring to inform their work as they:</p> <ul style="list-style-type: none"> • Explore emerging technologies, including miniaturized and autonomous computing systems, that detect street crime in real time. • Determine effective ways for neighbors to receive warnings (via wireless technologies, customized alarms, or a combination of methods). • Engage in discussion about the collection of data that pinpoints behaviors rather than individuals’ identities to presume possible threats to public safety. <p>Learn more</p>

Tools and resources

CDC Community Health Worker (CHW) Toolkit

Resources include online courses, lessons learned, and best practices to help state health departments train and further build capacity for CHWs in their communities. Training and education materials for CHWs to use within their communities.

Socially Connected Communities: Solutions for Social Isolation

Report from Healthy Place by Design that provides actionable solutions to tackle social isolation.

A Guide to Safe and Equitable Communities

A guide from the Center for Justice Innovation that shares the principles and practices that are necessary to create long-term, community-led solutions to community safety. The focus is on community-led, collaborative solution finding.

Opportunity Atlas

The Opportunity Atlas lets users explore the question “Which neighborhoods in America offer children the best chance to rise out of poverty?” using anonymous data from over 20 million Americans. It includes numerous economic and social outcomes, as well as neighborhood characteristics, and data can be disaggregated by race/ethnicity, gender, and parent’s income.

Child Opportunity Index

The Child Opportunity Index provides data, visualizations, and stories specifically related to child opportunity and neighborhood factors.

Opportunity Index

This index provides an opportunity score, economy score, education score, health score, and community score for every state. County level scores across all five domains are also available where county-level data was available.

Safe & Connected™ Practice Model

The Safe & Connected™ model of practice includes a research-informed framework, engaged assessments based on strengths, needs and risks, analytical decision making in partnership with families, and the process of evidence-based practice.

Food Research and Action Center

Provides research, data, and advocacy to end poverty-related hunger in the US. There are many resources available on their website about child and family nutrition programs.

Northwestern University Two-Generation Research Initiative

A great place to start for anyone who’s interested in learning more about the interaction between early education, workforce development, adult education, and social services.

National Neighborhood Indicators Partnership

A national learning network of partner organizations in over 30 cities focused on ensuring all communities have access to data and the skills to use information to advance equity and well-being across neighborhoods.

Adverse Childhood Experiences (ACEs)

Information from the CDC on what ACEs are, prevention strategies, and the original CDC-Kaiser ACEs study questionnaire, methods, and findings.

Brookings Institution Building Healthy Neighborhoods Series

This series explores a range of topics that cover the crucial elements to build a culture of health, education, and economic mobility in lower-income communities.

Build Health Places Network

BHPN is transforming the way organizations work together across sectors to advance racial equity and build healthy neighborhoods. Their site includes a wealth of resources and tools.

National Institutes of Health Social Wellness Toolkit

Social Wellness Toolkit with six strategies for improving your social health. Each strategy includes an overview of the issue, stories, and recommendations.

A Framework for a National Strategy to Advance Social Connection

The Surgeon General's Framework for a National Strategy to Advance Social Connection calls for action essential to our nation's health, safety, and prosperity.

UNITE (UNderserved communitiEs)

A community engagement model that's smart, deploying ubiquitous monitoring and lifelogging; connected, bringing together a diverse cast of community members including moms, families, care providers, and outreach resources; and coordinated, using technology to proactively reach out to the community and use personalized intervention and education for improved self-management by women.

Publications and Media

[Community Partnerships Are Critical to Improving Maternal, Infant Health](#)

Article from The Pew Charitable Trusts' Health Impact Project that outlines the need for cross-sector teams to prioritize the needs of local communities when developing health programs.

[Preventing Gun Violence With a Public Health Approach](#)

Report on the Cure Violence Global's program in Atlanta and Milwaukee.

[A new community safety blueprint: How the federal government can address violence and harm through a public health approach](#)

Article from Brookings Institution.

[Community-Based Doulas and MidwivesKey to Addressing the US Maternal Health Crisis](#)

Article in American Progress by Nora Ellmann.

[Community-Based Organizations Are Important Partners for Health Care Systems](#)

Findings from Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health.

[A Critical Review on the Complex Interplay between Social Determinants of Health and Maternal and Infant Mortality](#)

Journal publication from Children, authored by Rada K. Dagher and Deborah E. Linares.

[Perinatal Mental Health and Social Support](#)

Overview from the American Academy of Pediatrics.

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Appendix A

Additional resources

[The Pandemic Has Increased Demand for Data and Accountability to Decrease Maternal Health Inequity](#)

[Addressing the Maternal Health Crisis Through Improved Data Infrastructure: Guiding Principles for Progress](#)

[Collection of Race, Ethnicity, Language \(REL\) Data in Medicaid Applications: A 50-state Review of the Current Landscape](#)

[The Time Has Come for All States to Measure Racial Discrimination: A Call to Action for the Pregnancy Risk Assessment Monitoring System \(PRAMS\)](#)

[The Pregnancy Accommodation Guide developed by March of Dimes and A Better Balance aims to increase consumer awareness about Pregnancy Accommodation laws that exist in 30 states and 5 cities across the nation.](#)

Appendix B

Dismantle racism and address unequal treatment solutions



This Appendix contains a list of solutions that when implemented can advance equitable health outcomes for pregnant, birthing and postpartum people, their infants and families. These solutions that address the NEF strategy “dismantle racism and address unequal treatment” were crowd sourced during the co-creation of the NEF with over 600 individuals and partner organizations. This is a living document that is actively updated with new and emerging information. No single solution will create the foundation for optimal health or fully “fix” the current policies, systems, and practices that are driving inequitable outcomes.

Solutions can only be advanced equitably when they are informed by, advocated for, and include decision-makers from the communities in which they will be implemented. Although a solution may need to be advanced at the local, state or federal level, equitable outcomes require the authentic participation of community-based organizations and community leaders at every step of the process.

Solutions are listed under the categories: policy and legislative change, systems and institutional change, communications and training, data and research, and funding. Some solutions fit into multiple categories, and have been listed in the category that it most closely aligns with, or is the highest level of change needed to advance the solution, for example: “require all individuals who work with women and infants to be trained on implicit bias, stigma, root causes, and antidiscrimination practices”, is listed in policy and legislative change, but can also fit into the communications and training designation.











Finally, solutions in this Appendix have been given a designation of “preventing” or “mitigating”. Preventing refers to solutions that when advanced will prevent the risk factors leading to inequitable health outcomes and support the foundation for optimal health. These are the solutions that serve to dismantle the systems and policies rooted in racism that exist today and create a

foundation that is equitably built. Mitigating refers to solutions that bridge current gaps and provide safety net services and resources to ease the burden of existing risk factors. We have also denoted solutions that address multiple strategies, but recognize that solutions under “dismantle racism and address unequal treatment” are solutions that run across the entirety of the NEF strategies.

Key	
	Preventing the risk factors and/or supporting the foundation for optimal health
	Mitigating the existing risk factors, bridging gaps and providing safety net services

Solution Type	Solution	Mitigating VS Preventing
Research and data	Require government programs to collect and report on disaggregated data by race/ethnicity.	●
	The federal government should review and update the Office of Management and Budget (OMB) 1997 Statistical Policy Directive on Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity to more accurately reflect the demographics of the population of the United States and provide flexibility to states and local governments to capture information reflecting the populations specific to their communities.	●
	OMB should require all federal program reports to include data stratified by race, ethnicity, and other demographics where feasible.	●
	Require hospitals, clinics, & other private institutions accepting government contracts to collect and report disaggregated data on outcomes, numbers served, satisfaction, etc.	●
	Require an equity review of new proposed policies and laws to identify and correct for potential racism and inequitable outcomes before they get passed.	●
	Require adoption of the National Standards for Culturally and Linguistically Appropriate Services (CLAS) requirements for all hospitals, medical providers and government agencies.	●
	Require anti-racist designation for government institutions, organizations that could include business, NGO's, hospitals, and municipalities.	●
	Require all individuals who work with women and infants to be trained on implicit bias, stigma, root causes and antidiscrimination practices.	●
	Identify and resolve policies/laws/legislation that allow disproportionate distribution of resources and risks, create inherited group dis/advantage, favor the differential valuation of human life by race, and limit self-determination.	●
	Require equity reviews and remediation of current laws and policies that may contribute to differential outcomes and unintended consequences (based on race, income or zip code, gender, employment status).	●

Solution Type	Solution	Mitigating VS Preventing
Research and data	Require governing boards of organizations receiving government funds to be racially diverse and representative of the community the organization serves.	●
	Declare racism as a public health crisis (RPHC) to drive meaningful change to policies, laws and resource allocation.	●
	Require Federal Agencies & municipalities to fund and implement Government Alliance on Race and Equity (GARE) membership and cohort with engaged leadership.	●
Systems	Alter hospital and clinical procedures to collect and report on patient experience and establish patient community boards that are representative of the community serve.	●
	Align city, county, state and federal MCH officials and strategies to produce improved outcomes.	●
	Create and adopt internal processes for examining and correcting practices and procedures for organizational policies, norms, and values that uphold racism and its manifestations. (Govt agencies, NGO's, Corporate).	●
	Develop and disseminate a corporate version of Government Alliance on Race and Equity (GARE) providing resources and support to other organizations and institutions interested in deconstructing unequal treatment, norms, and values.	●
	Designate a process to ensure that racism and unequal treatment are an ongoing thread in local community action agendas (ie. Anti-racism chats, Decatur dinners, town hall meetings, K-12 curriculum development, etc.)	●
	Rectify and modify payment structures based on inequitable health care quality between Medicaid and privately insured.	●
	Hire historians to staff and participate in city councils, state legislatures, and US Congress.	●

Solution Type	Solution	Mitigating VS Preventing
Systems	Develop/disseminate/adopt curricula that discusses history, the legacy of racism and structures of disproportionate opportunity for schools of public health, medicine, social work, nursing, law, and more.	
	Develop/disseminate/adopt curricula for K-12 education that teach full histories the legacy of racism and structures of disproportionate opportunity.	
Communications and training	Develop a communication toolbox to discuss the legacy of racism and structures of disproportionate opportunity that includes allegories, billboards, films, podcast, songs, tweets, and webinars to discuss racism in other mediums.	
	Make a public declaration of racism discussing the legacy of racism and structures of disproportionate opportunity and the effects.	
	Draft an anti-racism commitment agreement for communities, businesses, and organizations, and create a sign-on or endorsement opportunity.	
	Run a media campaign including PSA's on implicit bias and stigmas. Train city, county, MCH, and state health officials on root causes of racial inequities in birth outcomes in concert with institutional practice and policy changes.	
	Train all employees on implicit bias, root causes and co-implement quality improvement, monitoring procedures and policies to identify unfair treatment.	
Research and data	Amend current data disaggregation to further disaggregate racial categories (i.e. Asian/Pacific Islander should be Pacific Islanders or SE Asian and American born Black and foreign-born Black). Consider how and when to stop disaggregation by race (as social construct) and consider disaggregation by other elements-income, zip code etc.	
	Generate disaggregated statistical estimates (statistical agencies should explore creating multi-year datasets) for national surveys that allow publishing estimates for small populations.	
	Catalog and research anti-racism efforts in other countries (Australia, New Zealand, South Africa, Brazil).	

Solution Type	Solution	Mitigating VS Preventing
	Catalog formal anti-racism policies adopted by US Jurisdictions.	●
	Catalog and research legislation addressing mechanisms of structural racism.	●
Research and data	Catalog and research impacts of racism on national and global health.	●
	Identify and disseminate evaluated anti-racist programs. (AMCHP Innovation Hub)	●
	Develop a science of anti-racism to shift the paradigm from a reductionist perspective to a cumulative and intersectional frame.	●
	Develop a compendium of measures of racism.	●
	Measure, publish, and monitor the differential treatment and asset allocation that has been assigned by race (as a social construct).	●
	Establish best practices for measuring sexual orientation, gender identity, disability, and rural location to remove barriers to consistent and inclusive data collection strategies.	●
	Add racism and discrimination measures on national surveys including BRFSS, YBRFSS, NHANES, and U.S. birth certificates (see GINI Index).	●
	Identify new systems and structures that are fair and free of racism to replace the systems that are deconstructed.	●

Appendix C

Increase access to high-quality healthcare solutions

This Appendix contains a list of solutions that when implemented can advance equitable health outcomes for pregnant, birthing, and postpartum people, and their infants and families. These solutions that address the NEF strategy “increasing access to quality healthcare” were crowd sourced during the co-creation of the NEF with over 600 individuals and partner organizations. This is a living document that is actively updated with new and emerging information. No single solution will create the foundation for optimal health or fully “fix” the current policies, systems, and practices that are driving inequitable outcomes.



Solutions can only be advanced equitably when they are informed by, advocated for, and include decision-makers from the communities in which they will be implemented. Although a solution may need to be advanced at the local, state, or federal level, equitable outcomes require the authentic participation of community-based organizations and community leaders at every step of the process.











Solutions are listed under the categories: policy and legislative change, systems and institutional change, communications and training, data and research, and funding. Some solutions fit into multiple categories,











Strategy key	
AR	Dismantle racism and address unequal treatment
HC	Increase access to high-quality healthcare
EJ	Promote environmental justice
EC	Advance economic opportunity
COM	Build safe and connected communities
↔	Cross-cutting all strategies











and have been listed in the category that it most closely aligns with, or is the highest level of change needed to advance the solution, for example: “require all individuals who work with women and infants to be trained on implicit bias, stigma, root causes, and antidiscrimination practices”, is listed in policy and legislative change, but can also fit into the communications and training designation.











Finally, solutions in this Appendix have been given a designation of “preventing” or “mitigating”. **Preventing** refers to solutions that when advanced will prevent the risk factors leading to inequitable health outcomes and support the foundation for optimal health. These are the solutions that serve to dismantle the systems and policies rooted in racism that exist today and create a foundation that is equitably built. **Mitigating** refers to solutions that bridge current gaps and provide safety net services and resources to ease the burden of existing risk factors. We have also denoted solutions that address multiple strategies.







Key	
	Preventing the risk factors and/or supporting the foundation for optimal health
	Mitigating the existing risk factors, bridging gaps, and providing safety net services

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Policy and legislative	Remove barriers preventing the full scope of qualified healthcare providers to deliver high-quality high-value obstetrical and gynecological care (i.e. private and public reimbursements, accreditation and licensing, scope of practice, birth settings, etc.)		
	Require implicit bias, anti-racism training and foundational understanding of how social determinants of health and root causes play a role in poor health for providers/hospitals/community health centers and other health-related organizations.		↔
	Require healthcare institutions to report data on differential treatment and outcomes, prescriptions, procedures, wait times, and other patient-centered indicators, stratified by socio-demographics (i.e. race, insurance status, gender, age, income, primary language spoken).		AR
	Tie Medicaid and private insurance payments for OB services to quality HEDIS/Joint Commission measures.		
	Require employers to provide paid medical leave for health care appointments for all employees including contract/gig economy workers.		
	Require adoption of the National Standards for Culturally and Linguistically Appropriate Services (CLAS) requirements for all hospitals, medical providers, and government agencies.		
	Require national implementation of Medicaid presumptive eligibility and restructure billing to equitably incentivize early entry to prenatal care, eliminate long wait times that delay care, and necessary prevention and treatment during pregnancy.		
	Extend full Medicaid coverage to at least 12 months postpartum.		
	Increase equitable access to doula care through adequate insurance coverage (i.e. living wages) and other related policy changes (i.e. workforce development).		COM
	Defend, protect, and transform Title X family planning program to provide full funding.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Policy and legislative	Increase access to group prenatal care through enhanced reimbursement rates.		
	Reimburse screening for social drivers of health and referral to social services.		COM
	Implement regulatory changes to eliminate prior authorization for evidence-based treatments to prevent preterm birth (PTB).		
	Implement regulatory changes to expand access to finance-medical-legal support through Medicaid. Example: Start Strong (Cradle Cincinnati/Avondale)		
Systems	Support the broad integration of behavioral health and medical services (one team-based integrated care approach). Example: Swinomish tribe in WA Digiwalic Clinic.		COM
	Establish incentives and payment reforms to incentivize ongoing QI and process improvement to address unequal treatment and to enforce equitable care.		
	Align public health strategies within government grants (i.e. Title V/ CDC/Title X) with desired outcomes, requiring integration with community members, providers, and systems.		COM
	Provide MCH Title V Block grants to Tribes/ sovereign nations allowing them to identify the best approaches to serve MCH outcomes in their communities.		
	Increase equitable access to evidence-based pharmacological interventions and treatments (i.e. low-dose aspirin, 17P, medication-assisted treatment) to prevent preterm birth and adverse maternal health outcomes via in home, pharmacy, and other community-based methods to increase utilization.		
	Increase equitable access to choices of providers and care settings for patients covered by Medicaid, by reducing system barriers and increasing system incentives (i.e. midwifery care, free-standing birth centers, home birth, and others).		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
	Increase equitable access to telemedicine solutions and care including access to cell phones, cell service, and internet.		
Systems	Increase equitable access to freestanding birth centers in medically under-resourced areas.		
	Integrate quality measure(s) for evidence based maternity care approved by National Quality Forum/Joint Commission.		
	Support patient choice and transparency by making maternity care quality measures publicly available.		
	Advance the adoption and spread of AIM Racial Peripartum Disparities bundle integrated within other QI bundles.		
	Create and/or enhance coordinated intake and referral across services (Healthy Start, WIC, Home visiting, SNAP, insurance, TANF, workforce development, housing, domestic violence, law, clinical care...) to reduce burden and ease the utilization of services for women and families.		
	Integrate community-based doulas into local health care systems.		COM
	Ensure that sexual and reproductive health care is accessible to all people without barriers (i.e. co-pays, prior authorization, or additional appointments).		
	Increase access to contraception (i.e. over-the-counter, pharmacist- and nursing-dispensing)		
	Implement and spread a sustainable model of group prenatal care.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Systems	Implement and spread a sustainable model of group prenatal care.		
	Develop and spread a sustainable model of postpartum group care.		
	Expand access to mobile medical care in medically under-resourced geographies.		COM
	Partner with pharmacies/pharmacists to reduce point-of-sale barriers to low dose aspirin (LDA) for the prevention of preeclampsia (i.e. safety messaging, professional education, consumer education).		
	Identify and address local (within state or across borders) transportation barriers for healthcare appointments and pharmacy access.		COM
	Increase racial diversity of maternity care workforce (i.e. midwives, obstetricians, maternal-fetal medicine physicians, nurses, community-based doulas, lactation support, perinatal mental health providers) by altering education/training, hiring practices/recruitment, provision of mentorship, adequate reimbursement, etc.		AR
	Scale pregnancy medical homes and implement navigator programs to connect women (regardless of insurance status) to a medical home/pregnancy medical home.		COM
	Scale community-based health first responders. Example: Community nursing replicate and expand the Alaskan Native Tribal Health Consortium's Community Health Aide Practitioner program in the lower 48 states and in rural and urban settings in medically underserved areas.		COM
	Advance the adoption of perinatal self monitoring blood pressure programs by hospital and clinic systems.		
	Increase adoption of TeamBirth and other solutions that create an inclusive approach to informed decision making during labor and delivery.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Communications and training	Create and run a consumer awareness campaign to increase awareness and utilization of community-based doulas, community health care workers, and other community health support services.		COM
	Create and run a consumer awareness campaign about healthcare solutions that may improve outcomes: low dose aspirin, wait 39 weeks, self-monitoring blood pressure cuffs, etc.		
	Create and run a consumer awareness campaign in states that have passed postpartum Medicaid extension to ensure consumers are aware that they have coverage to increase utilization of healthcare postpartum.		
Data and research	Collect, evaluate, report-on payment structures to inform improvements that can advance equitable high-quality care across public and private payers.		
	Collect and review data from self-monitoring blood pressure programs and to build the foundation of evidence for its adoption.		
Funding	Fund community-based organizations/programs providing doula training and perinatal support services.		COM

Appendix D

Promote environmental justice solutions

This Appendix contains a list of solutions that when implemented can advance equitable health outcomes for pregnant, birthing and postpartum people, their infants and families. These solutions that address the NEF strategy “promote environmental justice” were crowd sourced during the co-creation of the NEF with over 600 individuals and partner organizations. This is a living document that is actively updated with new and emerging information. No single solution will create the foundation for optimal health or fully “fix” the current policies, systems, and practices that are driving inequitable outcomes.



Solutions can only be advanced equitably when they are informed by, advocated for, and include decision-makers from the communities in which they will be implemented. Although a solution may need to be advanced at the local, state, or federal level, equitable outcomes require the authentic participation of community-based organizations and community leaders at every step of the process.











Solutions are listed under the categories: policy and legislative change, systems and institutional change, communications and training, data and research, and funding. Some solutions fit into multiple categories,











Strategy key	
AR	Dismantle racism and address unequal treatment
HC	Increase access to high-quality healthcare
EJ	Promote environmental justice
EC	Advance economic opportunity
COM	Build safe and connected communities
↔	Cross-cutting all strategies











and have been listed in the category that it most closely aligns with, or is the highest level of change needed to advance the solution, for example: “require all individuals who work with women and infants to be trained on implicit bias, stigma, root causes, and antidiscrimination practices”, is listed in policy and legislative change, but can also fit into the communications and training designation.







Finally, solutions in this Appendix have been given a designation of “preventing” or “mitigating”. **Preventing** refers to solutions that when advanced will prevent the risk factors leading to inequitable health outcomes and support the foundation for optimal health. These are the solutions that serve to dismantle the systems and policies rooted in racism that exist today and create a foundation that is equitably built. **Mitigating** refers to solutions that bridge current gaps and provide safety net services and resources to ease the burden of existing risk factors. We have also denoted solutions that address multiple strategies.

Key	
	Preventing the risk factors and/or supporting the foundation for optimal health
	Mitigating the existing risk factors, bridging gaps, and providing safety net services

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Policy and legislative	Require testing for environmental contaminants for new housing developments with set limits where it's safe to build.		
	Require industry/private development and production to occur at a safe distance from residential housing to ensure human safety and distance from toxic exposures.		COM
	Require remediation, redirection, redevelopment etc. where housing and traffic or industrial contaminants are intertwined (time bound to ensure progress is made).		COM
	Require states/cities to create a plan for community reporting of unsafe/toxic water and other toxic threats within a 48-hr time period from discovery through news media, print media, social media, and other community channels (i.e. phone, mail, door to door, community buildings, community parks, grocery/convenience store signage, and other media channels).		COM
	Require health and racial equity impact assessments before permits are provided for large road, industrial, or construction projects implemented by both government and private industry. Include requirement of a presentation to the community about the project, impacts that may occur (noise, pollution, traffic), hours of impact, project timeline and give the community time to respond to the city/county/state permits officer with any concerns or requests for changes.		COM
	Establish limits on air pollution/emissions (like CA) with Incentives and enforcement of sanctions and fines to hold companies and people accountable for pollution.		
	Require rentals and property sales to disclose (verbally and on paper) and appropriately educate on toxic levels, potential exposures, and potential health outcomes with easy to read materials.		
	Provide federal funds to American Indian tribes to support testing and remediation (if necessary) for toxins in housing, water, and tribal buildings.		COM
	Require state and local health jurisdictions to have a disaster plan that centers the pregnant and parenting person with plans for temporary housing, access to medical care, safe water, and nutrition.		COM
	Establish designated environmental health risk zones to mitigate risks.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Policy and legislative	Require creation of a federal heat stress standard.		
	Pass the Momnibus, including the Protecting Moms and Babies against Climate Change Bill.		↔
	Pass the A. Donald McEachin Environmental Justice for All Act.		AR
	Support environmental health related legislation or packages that center maternal and infant health. Include maternal and newborn health considerations in any climate health bills.		
Systems	Require an ongoing monitoring system of community exposure to environmental toxins (air, water, soil) and community reporting in plain language.		COM
	Appoint reproductive justice experts in the White House Office of Environmental Quality and in other key places, such as within emergency management, the office of air quality and in the interagency body on extreme heat.		
	Create an environmental health questionnaire for clinical/hospital intake.		HC
	Promote/Support opportunities to create green canopies in urban areas.		COM
	Build interagency coordination between environmental health and maternal and reproductive health at the state and the federal level.		
	Include environmental health experts in maternal mortality and fetal infant mortality review committees.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Systems	City governments should convene neighborhood leaders, maternal and infant healthcare providers, and health department staff to champion ideas that achieve equitable maternal health and pregnancy outcomes by addressing environmental health threats. Once locally tailored ideas are decided, the group—in authentic partnership with the community—should collect project data to identify the greatest needs and procure funding to implement paths to scale.		
Data and research systems	Build on the M-BAN Environmental Justice foundational report that covers the intersection of maternal health and the different aspects of environmental threats with additional topic briefs, toolkits, and research.		
	Partner with CDC Birth Defects Center and the NBDPN to promote and act on their birth defect/PTB studies that focus on environmental hazards and work to build local coalitions for action when local links to poor health outcomes are identified.		
	Establish new partnerships with experts, leading organizations to promote the investment in research to investigate safe ways to eliminate environmental toxins in water, air, and soil.		
	Promote and support implementation of an environmental health impact assessment and use of results in all institutional decision-making.		
	Research the data from EPA, CDC and local municipalities monitoring health outcomes using GIS and overlay with environmental conditions and known toxins to create a prioritized list for remediation in communities that need it most.		COM
	Research connection between redlined neighborhoods, heat vulnerability, and poor birth and maternal outcomes.		AR
	Research the phenotype of PTB related to the mapped neighborhood level and environmental data.		
	Review the state of the science with regard to environmental health threats to maternal and infant health and develop an action plan for government agencies to better protect maternal and newborn health.		
Funding	Increase funding for collaborative studies between CDC, NIH, and EPA demonstrating a connection between health outcomes and environmental pollutants/contaminant.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Funding	Fund infrastructure projects that would provide running water, where desired by local communities, and infrastructure-building jobs to indigenous rural communities.		
	Fund EPA and their community grants program for community infrastructure and repair for deteriorating/unsafe municipal water systems. Require that local community members are prioritized when hiring for infrastructure repair jobs.		COM
	Increase funding to the EPA and HUD specifically for community grants for lead, water, air quality testing, and ongoing monitoring and remediation that also provides jobs for community members.		COM
	Enhance funding for EPA and HUD for local grants to offer free testing and subsidized remediation for lead, mold, air pollutants, and other toxins.		COM
	Increase funding for enforcement of environmental safety laws and penalties.		
	Work to ensure that environmental protection, climate health adaptation, climate and environmental justice grant funding (Justice40) reaches reproductive justice organizations and frontline maternal and newborn health workers.		

Appendix E

Advance economic opportunity solutions

This Appendix contains a list of solutions that when implemented can advance equitable health outcomes for pregnant, birthing and postpartum people, their infants and families. These solutions that address the NEF strategy “advance economic opportunity” were crowd sourced during the co-creation of the NEF with over 600 individuals and partner organizations. This is a living document that is actively updated with new and emerging information. No single solution will create the foundation for optimal health or fully “fix” the current policies, systems, and practices that are driving inequitable outcomes.



Solutions can only be advanced equitably when they are informed by, advocated for, and include decision-makers from the communities in which they will be implemented. Although a solution may need to be advanced at the local, state, or federal level, equitable outcomes require the authentic participation of community-based organizations and community leaders at every step of the process.











Solutions are listed under the categories: Policy & Legislative Change, Systems & Institutional Change, Communications & Training, Data & Research, and Funding. Some solutions fit into multiple categories,











Strategy key	
AR	Dismantle racism and address unequal treatment
HC	Increase access to high-quality healthcare
EJ	Promote environmental justice
EC	Advance economic opportunity
COM	Build safe and connected communities
↔	Cross-cutting all strategies











and have been listed in the category that it most closely aligns with, or is the highest level of change needed to advance the solution, for example: “require all individuals who work with women and infants to be trained on implicit bias, stigma, root causes and antidiscrimination practices”, is listed in policy and legislative change, but can also fit into the communications and training designation.










Finally, solutions in this Appendix have been given a designation of “preventing” or “mitigating”. **Preventing** refers to solutions that when advanced will prevent the risk factors leading to inequitable health outcomes and support the foundation for optimal health. These are the solutions that serve to dismantle the systems and policies rooted in racism that exist today and create a foundation that is equitably built. **Mitigating** refers to solutions that bridge current gaps and provide safety net services and resources to ease the burden of existing risk factors. We have also denoted solutions that address multiple strategies.

Key	
	Preventing the risk factors and/or supporting the foundation for optimal health
	Mitigating the existing risk factors, bridging gaps, and providing safety net services

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Policy and legislative	Expand and reform current government grants or subsidies for housing improvement/repair. Ex. Look into HUD, USDA, National residential improvement association, VA, Native American Housing Improvement Program, HOME Investment Partnerships Program, federal housing administration.		COM
	Alter policy for the Hope VI block grant program to rebuild failing public housing units to ensure grants go to entities with a plan to house people in between phases and to reduce displacement by ensuring 1 to 1 placement for public housing units.		COM
	Ensure universal access to equitable and affordable housing by instituting higher estate taxes (American housing and economic mobility act-Sep 2018). Ex. Estate taxes fund expansion of federal subsidized housing and fund remediation and repair efforts to existing subsidized units.		COM
	Partner with the Kirwan Institute and other cross-sector partners to create a race and gender conscious economic bill of rights uplifting that health care, quality education, food, housing, guaranteed employment are human rights and that a set of goods and services are essential for people to survive and thrive.		AR
	Provide and expand grants for first time homebuyers that have experienced discrimination from red lining.		AR
	Reduce or freeze local property taxes to protect long-time residents in at risk neighborhoods.		
	Create and enforce fair housing law that includes: rules for prompt remediation for unsafe, hazardous or broken components, limited rent increases over X% per year limit evictions (just cause), ensure bug and pest free, clean, rent to first qualified candidate/anti-discrimination.		↔
	Expand Earned Income Tax Credits (EITC).		
	Expand childcare tax credits.		
	Rewrite the tax code in a race and gender conscious frame to subsidize and support low income rather than subsidized wealth to distribute equity.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Policy and legislative systems	Strengthen workplace pregnancy/parenting accommodations at the state level, building on the Federal Pregnant Worker's Fairness Act.		EJ
	Increase spending for primary and secondary education/schools to reduce inequities in educational attainment		
	Establish and fund a baby bonds program—create a trust account for each infant born up to \$60,000 investment amount to be calibrated based on current wealth.		
	Fund a jobs act-providing training and putting people to work in both social infrastructure positions and physical infrastructure position. Through local grants for revitalization, with strict enforcement on local implementation utilizing an anti-racist/equity informed lens.		COM
	Provide guaranteed basic income/unconditional cash programs for pregnant, birthing, and postpartum people.		
	Rewrite the fair housing laws and algorithms to promote equity.		COM
	Require salary range and benefits to be listed on job postings.		
	End taxation of diapers.		
Systems	Create a stabilization voucher (HUD) to be awarded to longtime residents at risk of gentrification communities to prevent displacement.		COM
	Enact Creating Moves to Opportunity Programs within local HUD/Housing Choice/Section 8 departments.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Systems	Fund, expand, and continue to evaluate Creating Moves to Opportunity (CMTO) program with in local Housing Choice-Section 8 programs.		
Systems	Prioritize pregnant women in housing/voucher programs, housing lists and expand the number of permanent housing options to solidify housing.		COM
	Invest in teachers, increasing salaries, forgiving student loans, and providing continued professional and development resources.		
	Perform regular pay audits within institutions and state governments.		
	Eliminate the question of “previous pay” on job applications.		
	Limit large-scale luxury development in at risk neighborhoods instead promote/ incentivize (subsidies) small and medium scale (mixed income) in at risk neighborhood.		COM
	Expand programs that help create first time home ownership.		COM
	Subsidize high quality childcare.		COM
	Subsidize high quality universal access to pre-school/pre-K coupled with increased EITC or income based basic income.		COM
	Expand state programs that provide free college tuition to students meeting income or eligibility thresholds.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Communications and training	Partner with STRIVE / Promise Neighborhoods and other education partners to support their efforts to drive equity in education.		COM
	Create and run a consumer awareness campaign on Pregnant Worker's Fairness Act to ensure people know their rights.		
	Create and run an awareness campaign to elevate messaging around baby bonds, guaranteed basic income, and other wealth building policies.		
Data and research	Conduct research on how best to reconstruct federal poverty algorithm and additional census level costs of living index.		
	Investigate 211 and systems to unify enrollment for ease of use in anti-poverty/ support programs.		
	Explore and compare various approaches to increase income levels while sustaining /expanding entitlement programs (minimum wage, tax system, need based cash assistance income, reparations, baby bonds/trust accounts etc.) through an anti-racist lens.		
	Explore international best practices (Germany etc.) in workforce development programs and identify or re-establish federal best practice for workforce development.		
	Identify and demonstrate how local implementation of the GI Bill and the New Deal systematically disadvantaged black people and other people of color and advanced the wealth for White people in order to advance policy language and protections for anti-racist and equity informed rules for local implantation of federal policies moving forward.		AR
	Quantify on average how many homeless pregnant women are in need of housing.		COM

Appendix F

Build Safe and Connected Communities Solutions

This Appendix contains a list of solutions that when implemented can advance equitable health outcomes for pregnant, birthing and postpartum people, their infants and families. These solutions that address the NEF strategy “build safe and connected communities” were crowd sourced during the co-creation of the NEF with over 600 individuals and partner organizations. This is a living document that is actively updated with new and emerging information. No single solution will create the foundation for optimal health or fully “fix” the current policies, systems, and practices that are driving inequitable outcomes.



Solutions can only be advanced equitably when they are informed by, advocated for, and include decision-makers from the communities in which they will be implemented. Although a solution may need to be advanced at the local, state, or federal level, equitable outcomes require the authentic participation of community-based organizations and community leaders at every step of the process.











Solutions are listed under the categories: Policy & Legislative Change, Systems & Institutional Change, Communications & Training, Data & Research, and Funding. Some solutions fit into multiple categories, and have been listed in the category that it most











Strategy key	
AR	Dismantle racism and address unequal treatment
HC	Increase access to high-quality healthcare
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closely aligns with, or is the highest level of change needed to advance the solution, for example: “require all individuals who work with women and infants to be trained on implicit bias, stigma, root causes and antidiscrimination practices”, is listed in policy and legislative change, but can also fit into the communications and training designation.

Finally, solutions in this Appendix have been given a designation of “preventing” or “mitigating”. **Preventing** refers to solutions that when advanced will prevent the risk factors leading to inequitable health outcomes and support the foundation for optimal health. These are the solutions that serve to dismantle the systems and policies rooted in racism that exist today and create a foundation that is equitably built. **Mitigating** refers to solutions that bridge current gaps and provide safety net services and resources to ease the burden of existing risk factors. We have also denoted solutions that address multiple strategies.

Key	
	Preventing the risk factors and/or supporting the foundation for optimal health
	Mitigating the existing risk factors, bridging gaps, and providing safety net services

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Policy and legislative	Pass legislation to fund and implement (within a racial and gender equity lens) social and physical revitalization projects that also provide community members employment and workforce development opportunities. Write strict rules for equitable implementation so that communities identified and resources provided are distributed and implemented based on racial, economic equity (see data on redlined communities).		EC
	Pass legislation to fund workforce development, and train community members to become physicians, nurses, behavioral health specialists, community health workers, doulas, social service providers, home visitors etc.		HC
	Require Medicaid reimbursement for screening and referral or intervention for social needs, stress, and adverse childhood experiences.		
Systems	Alter SNAP benefits to incentivize healthy food purchase at farmers markets, direct to farm (CSA's), mobile markets to increase purchase power and/or subsidize farmers markets selling to SNAP beneficiaries.		
	Solidify the 2014-2017 USDA grant with the Farmers Market Coalition to continue equipment support grants for POS equipment to accept SNAP cards for mobile markets etc.		
	Establish and fund a partnership with CDC and USDA to provide grants to fund mobile farmers markets, bus stop markets, Coop-markets in food deserts with equitable pricing for fresh foods.		
	Alter city, county and state systems and laws to require infrastructure projects (sidewalks, parks, restoration, street improvement...) to be distributed and implemented based on racial, economic equity (see data on redlined communities).		
	Alter policies to create citizen accountability boards and community connected policing.		
	Use zoning authority and mobilize community to address public health concerns to incentivize and disincentivize certain businesses (for example, urban agriculture, MARIJUANA/ alcohol/ tobacco sales, fast food, weapons, payday loans).		
	Alter systems to address over-policing and dismantle the treatment of mental health issues as a criminal justice issue.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Systems	Implement culturally appropriate toxic stress/ACE screenings in all healthcare, social service settings with appropriate referral settings.		COM
	Alter systems to repurpose unused public lands for community gardens, possibly pea patches, mobile farmers markets, playgrounds, safe walking paths, and mixed use.		
	Alter local systems to provide increased psychosocial support (culturally appropriate counseling) in public schools that includes mindfulness and resilience building. Programs and revenue stream for this are available.		
	In partnership with STRIVE, Promise Neighborhoods or other experts, alter systems to provide quality education by equitably funding schools for teaching the whole student.		
	Alter systems to invest in communities without displacement to ensure that those who live there (and suffer the most) can benefit from the improvements and are not just displaced to another area with bad outcomes.		
	Alter systems and funding streams to create interacting community systems and programs informed and led by community to foster healthy community supports for people of color via libraries, schools, faith-based centers, parks, community rec-centers, parent/child cooperative groups, etc.		
	Alter systems to provide community recreation centers supported by city/county parks departments that offer free or cost reduced access to fitness, yoga, tai chi, meditation, massage, recreation programs, cooking classes, community building programs.		
	Alter systems and identify funding streams to address heat (increasing ambient temperatures) via weatherization tied to redlined communities with less green space and high PTB birth risks.		EJ
	Alter systems and funding streams to provide community based CHWs, promotores, doulas, lactation consultants, etc to support women/families during preconception, prenatal, and postpartum periods.		HC
	Alter systems to foster an environment where we work in unison to provide people-focused infrastructures, programs, and services (i.e. human-centered design).		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Systems	Alter systems to prioritize historically underrepresented communities in transportation decision-making by requiring an intentional allocation of time and resources focused on listening to the voices that have been excluded and isolated.		
	Alter systems to reframe the transportation solutions conversation around values that people care about such as freedom to choose how to travel.		
	Alter systems to allocate funding and resources equitably to advance a multimodal transportation system putting people first.		
	Alter systems to improve the quality and diversity of transportation leadership that represents the community and the most disenfranchised populations to advance a people-centered transportation vision.		
Communications and training	Build workforce development programs to educate and train community members.		
	Train health care, teachers, social service providers and public health leaders in trauma informed care, Adverse Childhood experiences, resilience building and mindfulness.		
	Establish women's healing circles for preconception and prenatal women to begin process of healing incorporate education about telomeres, epigenetic and intergenerational effects of toxic stress, mindfulness, massage, and other positive coping mechanisms.		
	Implement community supportive group such as Moms2B (Ohio State University/ Wexner School of Medicine model), group prenatal care, as well as father groups in low-resourced communities.		
	Support and spread home visiting and Healthy Start with home visitors and staff from communities.		HC
	Develop toolkit for partners (e.g. Divine 9) around increasing coping skills among women (and girls) of color to be used for facilitating affinity groups.		

Solution Type	Solution	Mitigating VS Preventing	Cross-Strategy Solutions
Data and research	Research and catalog community-based interventions demonstrating improvements in birth and maternal outcomes.	●	
Funding	Fund programs and projects that expand greenspace and parks with shade in communities/neighborhoods that experience a disproportionate burden of heat.	●	EJ
	Fund a review of historic policies, practices, and systems put into place during redlining and assess the impacts and what policies, systems, practices are still in place and need to be changed and make recommendations with an anti-racism frame	●	AR



