



**BODILY
AUTONOMY
FOR ALL!**

>> Gender, Climate, and Reproductive Health in the United States

Brief Review of Literature, Policy
Recommendations, and Case Studies

APRIL 2025

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About the Women's Environment and Development Organization (WEDO)

The Women's Environment and Development Organization (WEDO), founded in 1991, is a global women's advocacy organization, working for a just world that promotes and protects human rights, gender equality, and the integrity of the environment. WEDO's headquarters is located in New York. Visit us at wedo.org.

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Preamble

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Feminist climate justice advocates have long asserted that climate policy must center considerations of racial, gender, and economic justice. If it does not, policy will only entrench injustices and fail to actually address immediate needs or the root causes of the climate crisis: white supremacy, capitalism, patriarchy and imperialism. In the U.S., these systems of oppression lie at the root of the crises we face, including the erosion of reproductive rights and environmental protections.

The connection between climate justice and bodily autonomy is a site of struggle for feminists globally, who have tirelessly highlighted the relationship between exploitation and human rights violations of land, territories and bodily agency and autonomy. The safety, health and well-being of our bodies are dependent on the health of the environment, at both local and planetary scales. In many important ways reproductive health is especially sensitive to the health of the environment and to environmental violence. From extreme heat's impacts on pregnant people, to exposure to toxic chemicals and microplastics, to hurricane recovery presenting challenges to accessing reproductive care, the climate crisis is a crisis for reproductive health.

Reproductive justice frameworks, spearheaded by Black and Indigenous activists and feminists, have positioned environmental and climate justice as deeply in relationship to reproductive health, rights and well-being.^{1,2,3} Reproductive justice

frameworks are paramount for understanding the intersection of bodily autonomy to race, gender, socioeconomic status, ability and beyond, and help illuminate the interconnectedness to the environment and climate. SisterSong Women of Color Reproductive Justice Collective defines reproductive justice as “the human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities.”⁴ Moving the struggle for reproductive rights far beyond individual choice and legal rights alone, their leadership invites an expanded understanding: what do safe and sustainable communities mean in the face of climate chaos and environmental racism? What does this demand of the climate and environmental movements, to see their interconnectedness and commitment to bodily autonomy and reproductive justice?

A note on the scope of this brief:

It is focused on providing an accessible and concise overview of some of the informational resources available on the intersection of reproductive health and climate justice in the U.S., accompanied by policy recommendations and case studies of activists advancing these issues. As a U.S.-based global advocacy organization, WEDO sees this brief as a contribution to resources supporting a movement towards driving more feminist, rights-based climate policy changes in the U.S.



Introduction

An intersectional feminist analysis helps reveal the differentiated and distinct impacts the climate crisis has on people and communities, across race, class, gender, sexual orientation, ability, age, and other intersecting identities, such as pregnancy status. When climate policy ignores the inequities between and amongst people and communities, those pre-existing injustices have the potential to be entrenched or even worsened. If we understand the climate crisis to impact every aspect of our lives and society—from labor, to energy, to transportation, to education systems, to our health—then we must work to understand what the particular realities of those impacts look like across communities, and policies must seek to shift and redress them.

Research around women's reproductive health, particularly research with a lens that recognizes intersecting identities and gender diversity, has been woefully underfunded and deprioritized.⁵ Unsurprisingly, this includes research into the intersections of reproductive health and climate and environment, though this landscape is changing rapidly and there is a robust set of resources and evidence available to learn from already. This brief provides a cursory overview of existing literature regarding climate impacts on reproductive health in the United States, including state-level or local-level studies that examine specific disaster events or types of impacts. While some of these studies may not be national in scope, they still offer valuable insights and findings to shape federal understanding and policies, recognizing the range of impacts across communities in the U.S.

After an overview of this research, the brief turns to four case studies of activists and organizations already spearheading work at this intersection. The expertise and lessons learned from this work must shape policy and decision making, and reminds us that feminists are already transforming the world around us, every day and in bold, innovative and collective ways.



Reproductive health impacts and considerations in climate policy

The climate and environmental impacts on reproductive health are numerous and interconnected, with research already confirming relationships to:

- Hypertensive disorders (pre-eclampsia, eclampsia)
- Antepartum and postpartum hemorrhage
- Prolonged labour
- Obstetric emergencies and caesarean sections
- Mental health conditions
- Preterm birth
- Low birth weight
- Neonatal sepsis
- Fetal distress (tachycardia, reduced movements)
- Stillbirth
- Neonatal mortality
- Impacts on breastfeeding practices
- Sleep disturbances
- Increased transmission of vector borne diseases with perinatal impacts

Before exploring the descriptions of specific climate impacts' consequences for reproductive health as outlined in the literature, underlying root causes must be examined.

Root causes

The climate crisis did not create reproductive injustice, the root causes of both did: white supremacy, patriarchy, capitalism and imperialism. The climate crisis exacerbates these inequalities, as a compounding crisis that most impacts people already vulnerabilized and oppressed by systemic racism, sexism and economic injustice. **These systems of oppression have rendered deep and violent reproductive injustices that the climate crisis intensifies.**

White supremacy, and environmental racism* specifically, have disproportionate and devastating impacts on the health and well-being of communities of color. The most severe climate impacts, from extreme heat to flooding to asthma rates,⁶ already disproportionately harm communities of color and low income communities due to decades of racist and anti-poor policies. Some researchers have even put forth the term “fossil fuel racism” to account for the particular type of environmental racism that allows the fossil fuel industry to externalize the costs and harms of pollution and environmental degradation onto communities of color.⁷ The cumulative impacts of structural racism result in women and non-binary people of color having disproportionately higher rates of chronic health issues, including those that impact reproductive health.⁸

* Environmental racism, as [defined](#) by environmental justice scholar Dr. Robert Bullard, “refers to any policy, practice or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups or communities based on race or color. It combines with public policies and industry practices to provide benefits for corporations while shifting costs to people of color. Government, legal, economic, political and military institutions reinforce environmental racism, and it influences local land use, enforcement of environmental regulations, industrial facility siting and the locations where people of color live, work and play.”

People of color in the U.S. are more likely to live near polluting facilities and industries,⁹ and one in every four people who are Black or Latinx live within three miles of a Superfund site, sites designated as environmentally hazardous to people's health, and seventy percent of the priority clean-up sites on this list are within one mile of federally assisted housing.^{10,11}

This environmental racism and climate injustice intersects with the deep inequalities that also already exist in reproductive health systems. Systemic underfunding, underinvestment and neglect in reproductive health services—rooted in patriarchy and white supremacy—has led to a serious maternal health crisis and prevented many birthing people from accessing quality care. The U.S. has the highest maternal mortality rate compared to other high-income countries, and these rates are three times higher for Black women than white women. The crisis of maternal health disproportionately affects Black and Indigenous pregnant people before and during birth and in questions of postpartum and infant health.¹² If advocates do not constantly interrogate the intersection of racism, sexism and classism within reproductive health research and policies, the true roots of harm will not be addressed.

A note on harmful narratives

Approaching the intersection of climate and reproductive health must be done with a human rights based, anti-racist, intersectional framework that centers bodily autonomy. There is a long history—and present—of some actors pedaling harmful narratives around “population control” as climate action. We must reject these racist narratives, rooted in white supremacy and colonialism. By placing false responsibility of the climate crisis onto birthing people—usually those of color, who are in the Global South, and who are low-income—the narrative both erases the real culprits of the crisis and can lead to horrific violations of bodily autonomy and consent. A human rights-based analysis honors bodily autonomy for all and does not reduce the suite of SRHR services to family planning. Some additional resources on this subject:

- [“On Infertile Ground: Population Control and Women’s Rights in the Era of Climate Change,”](#) by Jade Sasser
- [“Dangerous Intersections: Feminist Perspectives on Population, Environment, and Development,”](#) by Jael Silliman and Ynestra King
- [“In Puerto Rico, A History Of Colonization Led To An Atrocious Lack of Reproductive Freedom,”](#) by Raquel Reichard
- [Sexual and Reproductive Health and Rights and Climate Justice Messaging Guide,](#) produced by the SRHR & CJ Coalition

Impacts: Understanding the sites of reproductive health and climate/environment intersections

Extreme heat

Extreme heat is the leading cause of weather-related deaths in the U.S.,¹³ and its impacts are only worsening. With higher peak temperatures and more prolonged time periods of extreme heat, the impacts on public health are staggering, including reproductive health. In one illustrative state-level study in California, researchers determined that extreme heat exposure during the final weeks of gestation, and specifically the last week, may increase risk of preterm birth.¹⁴ Examining a much larger scope, in a systematic review of more than sixty medical studies of over thirty million births across the country, researchers found a “significant association” between heat exposure and adverse pregnancy outcomes such as preterm birth, low birth weight and stillbirth.¹⁵ Of the studies that examined heat exposure specifically, 90% demonstrated a connection to adverse pregnancy outcomes. Pregnant people of color were most at risk of these outcomes, in particular Black pregnant people.

In another study examining over fifty million births over 25 years nationwide, findings demonstrated that after four or more consecutive days of exposure to extreme heat, the chance of a pregnant person experiencing a preterm birth is 2% higher, and higher generally for young pregnant people and Latinx and Black pregnant people.^{16,17} A state-wide study in New York throughout summer months showed that extreme heat exposure was associated with increased risk of pregnancy complications, including renal diseases, infectious diseases, hypertension and others, most impacting Black and low-income pregnant people.¹⁸

Hurricanes and flooding

Hurricanes and flooding are another related set of climate-related disasters with consequences for reproductive health and well-being. While there is a dearth of research, and conflicting accounts of whether there is a strong association,** some studies have illuminated the relationship between these disasters, mental and reproductive health of parents. One study that examined postpartum mental health after Hurricane Katrina found that postpartum women who experienced extreme weather events severely were at increased risk for mental health issues,¹⁹ and another study of women who were pregnant during or immediately after Hurricane Katrina found that hurricane exposure was significantly associated with induction of labor and perceived stress, predisposing to pregnancy-induced hypertension and gestational diabetes.²⁰

Another integrative review that covered nineteen studies around hurricanes and pregnancy outcomes, which included seventeen in the U.S., indicated that exposure to hurricanes were associated with pregnancy complications, preterm birth, low birth weight, although it is noted that the associations were not always consistent in design and type of exposure.²¹

**One example of a study that does not find associations: Grabich, S. C., Robinson, W. R., Konrad, C. E., & Horney, J. A. (2017). Impact of Hurricane Exposure on Reproductive Health Outcomes, Florida, 2004. *Disaster Medicine and Public Health Preparedness*, 11(4), 407–411. <https://pubmed.ncbi.nlm.nih.gov/28093094/>

Wildfires

With more frequent, long-lasting, and unpredictable wildfires across the U.S., the impact of fine particles and other air pollutants from wildfire smoke on reproductive health is a critical research gap that must be filled. The preliminary studies that exist show that exposure to wildfires are associated with an increased risk of low birth weight.²² One study in California that examined smoke plume data alongside data from births between 2007-2012 suggests that 3.7% of preterm births in this time period were attributable to wildfire smoke.²³ A recent landmark report from Human Rights Watch examined wildfire impacts on communities in Oregon in depth through interviews with health workers, doulas, social workers, community health care workers, and other care providers. Interviews recounted concerns of wildfire impacts on maternal mental health due to displacement, evacuation and fear (with many of these mental health impacts affecting reproductive care providers as well), physical health impacts from the smoke, disrupted birth plans, and reduced access to quality care.²⁴

A note on mental health

There is a clear connection between reproductive health and mental health, with many maternal mental health impacts associated with climate impacts, and most affecting people of color. While some have been briefly touched on in this brief literature review, doing justice to exploring the full nature of mental health impacts—and their intertwined relationship to reproductive health impacts—is beyond the scope of this brief. Some articles to learn more about this specific intersection:

- [Combined effects of Hurricane Katrina and Hurricane Gustav on the mental health of mothers of small children](#)
- [Women's mental health and climate change Part II: Socioeconomic stresses of climate change and eco-anxiety for women and their children](#)
- [Loss of Resources and Hurricane Experience as Predictors of Postpartum Depression Among Women in Southern Louisiana](#)

Fossil fuels: Petrochemicals and pollution

Pollution and toxins from the burning of fossil fuels have direct reproductive health impacts on people and communities living near sites of fossil fuel production, extraction and processing, with environmental racism drastically shaping who is impacted to this exposure.²⁷ People living or working near fossil fuel infrastructure are often exposed to petrochemicals, chemicals produced through the refining process of fossil fuels, and other chemical pollutants. Some of these chemicals may interfere with a body's ability to produce or respond to hormones, something crucial to health holistically, but in particular for reproduction. Often known as endocrine-disruptors, these petrochemicals have been linked to birth defects, reduced sperm count, reduced fertility, and other health issues.²⁵

The pollutants from fossil fuel infrastructure can seep into air, land, and water sources for nearby communities. While there is much more research needed to be done to trace these sources and pathways, there is evidence that exposure to oil and gas extraction activities increases risk of miscarriage, prostate cancer, and birth defects.²⁶ Studies show an association between exposure to air pollution with adverse birth outcomes, including preterm birth,²⁷ and hypertensive conditions in pregnant people.²⁸ In one of the first studies examining impacts of air pollution on the success of IVF, scientists linked increases in exposure to air pollution to lower egg survival and embryo quality.²⁹

In Colorado, scientists found that women living near fracking sites were 30% more likely to give birth to a child with congenital heart defects than someone not living near fracking wells.³⁰ In Pennsylvania, living near unconventional natural gas development was associated with preterm birth and high-risk pregnancies,³¹ and in another study, pregnant women living near hydraulic fracking activity were more likely to develop depression and anxiety.³²

One groundbreaking study in California examined public health data and birth records in the populations around eight shuttered coal and oil power plants before and after they ceased operations, finding the closing of the power plants to be associated with a decrease in preterm births.³³

There are also strong links between fossil fuel infrastructure and increases in gender-based violence and the crisis of Missing and Murdered Indigenous Women, Girls and Two Spirit People. Frontline Indigenous advocates and organizations have long sounded the alarm about the crisis of gender-based violence that is connected to fossil fuel production and processing. When fossil fuel companies come to an area, it is well documented that there are increases in gender based and sexual violence against women and non-binary people, and that the corporate power of fossil fuel companies, paired with institutionalized patriarchy and racism in the U.S. legal system, protects these men and fossil fuel companies from accountability and justice.³⁴

Disaster response

While there are direct reproductive health impacts and consequences from events described, such as extreme heat, hurricanes, and wildfires, *responses* to these events also have the potential to either address these impacts or worsen them. Existing research demonstrates key shortfalls and additional impacts from disaster responses.

Lack of reproductive and sexual health care and services after disasters

Provision of reproductive health care and services, such as contraception, STI services, IVF services, prenatal care, and more, is often absent or delayed in disaster response. One study after Hurricane Katrina found that young women were less likely to have accessed family planning services after the hurricane, compared to the baseline.³⁵ After Hurricane Michael in Florida, one study showed prenatal care was provided at a later period in the pregnancy than in a time period one year before the hurricane.³⁶ Investigations into HIV health care access showed that parts of the U.S. where HIV is being diagnosed at disproportionately high rates are also areas most at risk of extreme weather events and disasters.³⁷

These events further jeopardize already inequitable access to preventative care and treatment; after Hurricane Ida in New Orleans in 2021, a survey from the New Orleans Health Department Ryan White HIV/AIDS Program revealed that 30 percent of patients who evacuated had trouble accessing HIV care, and 32 percent of those who remained in the city had challenges accessing care.³⁸ Another qualitative study of individuals who were seeking abortion services in Texas during Hurricane Harvey illuminated the need for financial support from abortion funds to find the means

to travel for an abortion.³⁹ Importantly, beyond prenatal care, disasters also may interrupt access to basic supplies critical for parents and young children, like diapers and milk. One qualitative study in Louisiana examined the responses to a doula collective's perinatal and infant feeding hotline after two hurricanes, finding both a need of infant formula and supplies and perinatal and infant care referrals.⁴⁰

Damage to infrastructure, and slow infrastructural recovery, further entrenching risks to reproductive health over time

Severe weather events often cause large-scale power outages over weeks, posing particular risks to hospitals delivering life-saving and sustaining care, which is in only higher demand in the aftermath of a disaster. One study that examined the massive power outages in 2012 with Hurricane Sandy found that preterm birth delivery and gestational diabetes increased during the power outage period, most impacting young, Black, Latinx, and uninsured pregnant people. Pregnant folks who were Black or Latinx experienced a 20.9% and 25.9% increase, respectively, in pregnancy complications, compared to a 5.6% increase in white people who were pregnant. With power outages being associated with increased risk of pregnancy complications, the intensity and length of that power outage can have varying impacts.⁴¹

After Hurricane Helene in 2024, abortion and reproductive health centers were unable to provide services for weeks due to power outages, road damage, and lack of running water. Providers and reporters recounted how patients seeking abortions were unable to access them due to the impacts of the hurricane, delay in care pushing people past the timing of state legal bans, abortion pills or medication sent through the mail being delayed or failing in its delivery, and patients also being forced to make sudden financial choices between recovery from the hurricane or paying for their planned reproductive health care.⁴² Another study after Hurricane Ike in 2008 looked at changes in women's reported access to contraception over almost two years post-hurricane, where 13% of women reported difficulty accessing contraception, disproportionately impacting Black women.⁴³ These longer-term infrastructural impacts of climate disasters can severely impact reproductive health, particularly when care or services are time-sensitive and completely dependent on energy and transport systems damaged by extreme weather.

Response measures and services are not inclusive, risking further impacts on queer, transgender, and non-binary folks

Current disaster response policies and service provision is largely organized through a gender binary, with little to no consideration of lived experiences and needs outside of it. Due to heteronormative policies and planning, LGBTQ+ people and families are at risk of being separated or not supported with disaster relief when it is provided. For example, shelters that require identification that corresponds with a person's gender identity may deny access and services to transgender people.⁴⁴ Examples of lack of access during Hurricane Katrina included federal and local disaster relief being provided to only cisgender, heterosexual couples, as well as FEMA and the Red Cross deprioritizing aid for those not in a heterosexual relationship.⁴⁵ There have been documented cases of queer couples being forced to pose as siblings to prevent being separated by gender in relief shelters and in order to access benefits from FEMA for themselves and family.⁴⁶ If disaster response policies and services are not structured to support people of all genders, gendered inequalities in the aftermath of disasters will persist and be reinforced, hurting queer, trans, and non-binary individuals.



Global Dimensions of Reproductive Health, Gender and Climate

There is robust research, advocacy and activism happening at the intersection of reproductive health, bodily autonomy and the climate crisis across regions and at the global level. Since this brief aims to provide a brief review of existing literature in the U.S., provide policy recommendations and uplift case studies, it cannot do justice to the range of global resources and expertise available. However, in the spirit of global feminist movements, it is critical that local and national research, advocacy and organizing learns from and is in conversation with this work happening around the world. This brief itself was created from inspiration of the comprehensive resources available in other national contexts, and the value in contributing to a collective global library of resources. Please find the list below as just a kickstarter for further reading on global justice, reproductive health and the climate crisis.

Kickstart Global Resource List on Reproductive Health and Climate Justice ***Peer-Reviewed Literature***

- [“Climate change and sexual and reproductive health and rights research in low-income and middle-income countries: a scoping review”](#)
- [“Heat Exposure and Maternal Health in the Face of Climate Change”](#)
- [“Flood exposure and pregnancy loss in 33 developing countries”](#)
- [“The impact of flood on pregnancy outcomes: A review article”](#)
- [“Air pollution and pregnancy”](#)
- [“Climate change and preterm birth: A narrative review”](#)
- [“A systematic review and meta-analysis of heat exposure impacts on maternal, fetal and neonatal health”](#)

Reports

- [Sexual Health and Reproductive Rights and Climate Justice Coalition](#) - and [Coalition Resources \(webinars, event recordings, and policy briefs\)](#)
- [“The Link Between Climate Change and Sexual and Reproductive Health and Rights: An Evidence Review,”](#) Women Deliver
- [“Bangladesh: Women’s Sexual and Reproductive Health and Rights \(SRHR\) and Climate Change: What is the Connection?”](#) a scoping study from ARROW and Khan Foundation
- [“Findings from Mozambique and Bangladesh: Climate change impacts reproductive health,”](#) Ipas
- [“Protecting maternal, newborn and child health from the impacts of climate change - A UNFPA-UNICEF-WHO call to action,”](#) UNFPA

>> Policy Recommendations

1 Stop sites of reproductive and environmental harm: shut down fossil fuel infrastructure, clean up polluting facilities, and support impacted neighboring communities.

- Every day fossil fuel infrastructure continues to emit air pollution and poison communities. Ceasing the construction of new fossil fuel facilities would have immediate positive impacts on reproductive health.
- Cleaning up polluting sites and supporting the medical care of those impacted—which has compounded over decades—is crucial for attempts at repair. The Polluter Pays Principle should play a major role here in determining responsibility and remuneration.⁴⁷

2 Ensure community-based disaster preparedness and emergency response planning includes reproductive health considerations and services.

- Disaster preparedness and emergency response measures must put foresight and planning into specific reproductive health considerations and needs to prevent disruptions to access and compounding of harm. The moments immediately after disasters are pivotal for care to ensure longer term impacts from challenges in accessing care do not arise.
- FEMA, state and local level planning should include consultation with reproductive health experts and feminist civil society, including reproductive justice organizations, health advocates and service providers to ensure their expertise is integrated in disaster planning and preparedness. This will guide decisions around which medicines, materials, culturally-relevant communications, structures of support and care, and other resources are provided by responders and are targeted towards reproductive health considerations.
- This includes incorporation of preventative measures, such as provision of affordable and accessible protections like air and water purifiers, and financial support to evacuate areas, as well as disaster response measures, such as interventions to ensure quality, reliable access to reproductive health care and services.
- Dissemination of education and information is key. Information on disaster preparedness should educate the public about the specific health impacts to pregnant people, identify them as a priority group, and intentionally reach them with any special notices, warnings, or outreach.

3 A wide range of reproductive health experts should be outreached to and consulted in *climate policies and planning*, including nurses, midwives, doulas, gynecologists, reproductive health advocates, LGBTQI+ advocates and organizations, and patients.

- ➔ Reproductive health care considerations cannot be assumed to be included and integrated within general health. Though there is greater inclusion of and consultation with general health experts and medical professionals in climate policies and planning, this does not guarantee gender or reproductive justice considerations are heard or understood.
- ➔ Those on the frontlines of reproductive care and advocacy—particularly patients, nurses, doulas, abortion providers, doctors focusing on reproductive care, LGBTQI+ organizations and advocates—understand particular dimensions of how the climate crisis is impacting their well being and/or work. Their experiences and expertise are paramount to constructing inclusive and just climate policy.
- ➔ The Environmental Protection Agency and the White House Climate Policy Office, as well as equivalent climate-focused state and local-level agencies and offices, should include reproductive health and gender experts in their staff, and prioritize consultation that integrate these perspectives in their assessments and work, which currently are minimal.
- ➔ Climate policies and planning often include specific recommendations or consideration of the labor sector. Applying a reproductive health lens here means strengthening workplace protections that are in place for pregnant workers, like rights to accommodations, and considering additional impacts caused by climate and environment to their job, like extreme heat or air pollution in the workplace.

4 Allocate funding and research towards better illuminating climate and reproductive health dimensions, particularly along lines of race, class and gender, to shape policy.

- ➔ As noted many times in this brief, while policymakers must certainly learn from the plethora of research that exists at this intersection, there are still striking gaps. There must be deeper investment in research that investigates the impacts of wildfires, hurricanes, flooding, fossil fuel toxins and pollutants exposure, and heat exposure, on reproductive health across different contexts.
- ➔ This research must be intentional in applying an intersectional lens that visibilizes inequities across race, class, gender, and other intersecting identities.



Case Studies

Raising awareness of impacts of heat waves

Extreme heat is increasingly a pressing climate and public health issue in Miami, Florida. Working in partnership with the city's newly appointed Chief Heat Officer—the first position of its kind in any U.S. city—The Women's Fund Miami-Dade launched an innovative new campaign aimed at public awareness around heat's impacts on pregnant people. After working to get pregnant people included as a vulnerable population on the city's emergency management and response website with critical health information, it was clear that public awareness around the risks was a key next step to even getting traffic to the website page. A heat messaging team, working in conjunction with national advocates on best practices and narratives, helped shape the core messaging materials.

Materials were created in three languages (English, Spanish and Haitian Creole) to share an accessible and brief message that would invite folks to the website to learn more: "Heat can be dangerous / Pregnant people face extra risk / Know the signs / Find resources" with the website URL. By posting billboards and posters in targeted public spaces, such as bus shelters where people linger as they wait for transportation and signs on the metro or buses, the campaign reached as many people as possible with the funds available for the resources. Advocates say a potential next step is choosing additional strategic sites of disbursement: for example, offering pamphlets in the waiting rooms of OB/GYN offices or other reproductive health service buildings.

"I think people kind of did a double take every time they would see the campaign outdoors because they just didn't know about it before, and it was well received from community organizations that we worked with. There's a lot of community-based organizations that work in the environmental space here in Miami, and there's even an urban heat group at the University of Miami, so connecting the research to the right groups to the messaging was key. It's not just about the data, it's important that the public awareness and the education piece is connected."

VIVIANA ALVARADO PACHECO, *The Women's Fund Miami-Dade*

Focusing on birthworkers as change agents for transforming perinatal health in wildfire season

Wildfire exposure can be associated with preterm birth and low birthweight, shaping the trajectory of health for the birthing person and child. In Oregon, a state experiencing devastating wildfires in recent years, the organization Nurturely is focusing on birthworkers as catalysts for climate action. Dr. Emily Little, Founder and Executive Director of Nurturely, said birthworkers are "direct service providers on the front lines every day serving families. They are fierce advocates for the pregnant and postpartum parents in their care. Though most birthworkers do not receive any training or education in climate topics, they are usually eager for more tools that will allow them to support families."

The Wombs & Wildfires project brought together birthworkers and researchers to share testimony, lived experience and data about the harms and impacts of wildfire exposure before and after birth.

They convened a cross-sector working group for a year, developing trainings and resources targeted towards birthworkers, healthcare professionals and other stakeholders with the tools needed to support expectant families prepare for wildfire season. These resources include one-pagers that clinicians and birthworkers talk through with pregnant people and families on how to best protect themselves, including with home improvements, mask recommendations for smoke, and developing birth plans in case of evacuation or displacement. There is also a crowd-sourced collective resource list of readings, research, and writings for Oregon residents. Dr. Little said, “The feedback from birth workers has been overwhelmingly positive, as they’ve expressed appreciation for the resources and training that enable them to better support their clients amid increasing environmental challenges. They’ve reported feeling more confident in their ability to discuss and manage environmental health risks.” Nurturely also sees these lessons learned as applicable for community birthworkers beyond Oregon, as the self-paced course for Perinatal Equity Advocates can be taken from anywhere and applied to a variety of environmental conditions.

“Nurturely makes wellness before and after birth a human right. The climate crisis is one of the biggest threats stopping parents and babies from having the safe, healthy, equitable experience they deserve. There is mounting evidence that extreme heat, wildfire smoke, and environmental toxins contribute to preterm birth, low birth weight, stillbirth, and intergenerational health complications. The perinatal period is a critical window, meaning the impacts of climate-related exposures and stress are felt for multiple generations.”

DR. EMILY LITTLE, *Founder and Executive Director of Nurturely*

Distributing diapers and other childcare provisions to people and families post-climate disasters

The National Diaper Bank Network (NDBN) is an anti-poverty network of more than 250 community-based nonprofit organizations that distribute diapers, menstrual products, and other basic necessities at the local level. Though the distribution of products happens consistently—usually on a monthly basis—NDBN understands that after climate disasters like hurricanes, flooding, and wildfires, the basic needs of impacted communities can be particularly stark. NDBN works to fund and support replenishment of supplies distributed by local diaper banks responding in emergency situations. Since local diaper banks are already poised and equipped to respond to the local community’s needs, NDBN sees replenishment as their core role as a national organization.

“I think that replenishment is really important – as opposed to trying to get in as non-local providers. There are people on the ground in almost every community who distribute products. We should recognize their expertise and take advantage of their ability instead of trying to get truck after truck in, without a clear plan of what is actually most needed. I also think it’s really important, as national organizations, to work with local organizations. Many of the national organizations that do disaster response go in with their staff, and they set up their own places, and it can create difficulty with the organizations that are on the ground that normally do these things, because people don’t know where to go. I think finding a way to work with existing networks is important.”

JOANNE GOLDBLUM, *CEO of the National Diaper Bank Network*

Training doulas to integrate climate and environmental considerations in their support

Recognizing that doulas and community birth workers play a pivotal role in supporting so many pregnant people through the birthing process, the Metro Mommy Agency is piloting a new training program that integrates climate and environmental considerations for doulas. Located in South Florida, advocates knew that things like extreme heat and hurricane season were already playing a role in shaping the experiences and decisions that pregnant people and families were making. From considerations of how to protect yourself from the health impacts of extreme heat, to navigating how to plan for accessing appointments or services under possible disruption in hurricane season, the decision-points during pregnancy are plentiful. Doula and community birth workers are uniquely positioned to be supporting people through those decision points, with resources and support, given the longevity, frequency and consistency with which they interact with the pregnant person. The Metro Mommy Agency, through collaboration with local organizations, researchers and national advocates (including Florida Clinicians for Climate Action and with funding from the CDC Foundation), developed a training curriculum called the Doula Climate Health Outreach Team (D-CHOT), made available to doulas in their mentee training program and network. The resource provides learnings for doulas on how environmental factors can shape the health of pregnant people, risk factors to consider, and tools for assessing needs with clients.

“We have worked to create resources so that our doulas can fill that gap and educate our clients on ways that they can become more resilient and mitigate their risk. We’ve seen when it comes to, for example, the flooding—it doesn’t necessarily mean that they’re in a flood zone when the flooding is happening, but it can limit their access to leave their homes, to make it to appointments...Doulas can come in providing informational, emotional, and physical support at a level that is on the ground, and usually more accessible. This can be sharing information, support at the birth, doing things prenatally. We are in their homes. We’re seeing their living environment. We’re assessing how cool or how warm it is in that home. And while our traditional training doesn’t advise us per se to go in and measure the temperature and to provide all of these additional resources, doulas have been trained to help when they see the need. And so what I am hoping is to leverage the fact that doulas already care.”

ESTHER ROSE LOUIS, CEO of Metro Mommy Agency



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