Matters of the Heart: Inequities in Cardiovascular Maternal Health Outcomes in Wisconsin



Issued by the Wisconsin Maternal Mortality Review Impact Team







Why is this issue important?

Cardiovascular conditions are the leading cause of pregnancy-related death for Black people in Wisconsin.

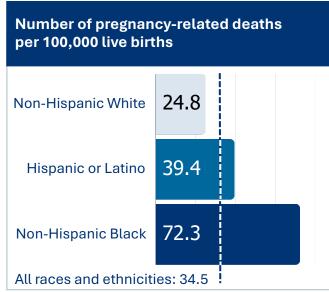
Black people in Wisconsin continue to die from pregnancy-related causes at more than twice the rate of the general population, with 72.3 pregnancy-related deaths per 100,000 live births among non-Hispanic Black people, compared to 34.5 deaths per 100,000 live births for all races and ethnicities (see graph below).

While mental health conditions are the leading cause of pregnancy-related deaths for Wisconsinites overall, cardiovascular conditions are the leading cause for Black people.

Black people experience higher rates of cardiovascular conditions during pregnancy, including hypertension and preeclampsia, which increase the risk of severe complications during pregnancy, delivery, and postpartum, and can even lead to death. In Wisconsin, cardiovascular conditions account for nearly one in three (31%) pregnancy-related deaths among Black people.²

This highlights a critical and preventable contributor to maternal mortality in our state. Addressing this crisis is essential, not only to save lives, but to ensure that every pregnant and postpartum receives the care and support they deserve.

In this brief, we explore the impact of cardiovascular health on maternal outcomes and share recommendations for creating lasting change.



Source: Wisconsin Department of Health Services, Division of Public Health, Maternal Mortality Review Program, 2020-2022.



Hypertension and cardiovascular disease play disproportionately large roles in Black maternal mortality, but it's not solely due to biological differences. A combination of systemic, social and health care-related factors significantly contributes to the increased risk.

Black people face higher rates of hypertensive conditions during and after pregnancy nationally, including: ³

- Earlier onset and more severe progression of hypertension.⁴
- Greater risk of preeclampsia and eclampsia, which can lead to organ damage, stroke, and even death.⁵
- Elevated long term cardiovascular disease risk following adverse pregnancy outcomes.⁶

These medical conditions are worsened and too often left untreated leaving an increased risk for maternal mortality due to:

- Symptoms and concerns more likely to be ignored or downplayed by health care providers.⁷
- Limited access to care and poorer quality of care when it is received.8
- Chronic stress and the physiological impact of racism which contribute to poor heart health and pregnancy complications.⁸
- Implicit bias and structural racism that influence diagnosis, treatment, and outcomes across the health care system.⁷

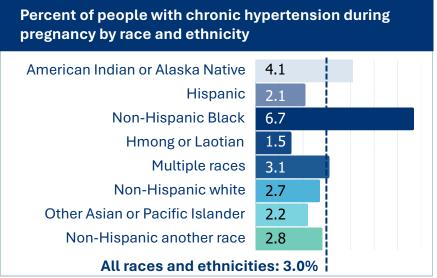
What else does the data show?

Cardiovascular conditions were the second most common cause of pregnancy-related death in Wisconsin from 2020–2022 (14%), which highlights a critical and possible preventable contributor to maternal mortality in our state.²

In 2020 alone, 7,113 Wisconsinites experienced hypertensive disorders during pregnancy or at delivery and 48 suffered severe cardiac complications.⁹

Pregnancy-related cardiovascular conditions

- Blockages (sometimes called embolisms) in arteries and veins
- Stroke (also called cerebrovascular accidents)
- Blood pressure disorders of pregnancy, including preeclampsia and eclampsia
- Heart muscle problems (called cardiomyopathy)
- Heart disease



Source: Wisconsin Department of Health Services, Division of Public Health, Birth Records, 2022-2023

Hypertension and other cardiovascular conditions are also among the leading causes of pregnancy-related deaths in the U.S. nationally, disproportionately impacting Black people.^{10,11}



Recommendations to move data to action

Reducing black maternal mortality requires concerted action across patient, provider, and public health policy levels.

The Wisconsin Maternal Mortality Review Team (MMRT) reviews all deaths that occur during or within one year of the end of pregnancy and then makes recommendations to prevent future similar deaths. The Maternal Mortality Review Team does their best to look at all potential contributing factors to the death, which can lead to a broader set of recommendations and more opportunities for prevention.

These recommendations and key questions are summarized from the 2024 report, <u>Wisconsin Maternal Mortality Review Team Recommendations</u>: 2020 Pregnancy- Associated Deaths (P-02108) (PDF).



Provider recommendations

- Educate patients on heart disease warning signs in culturally relevant ways.
- Discuss preconception planning for those with chronic conditions or past preeclampsia.
- Prioritize in person postpartum visits for high-risk patients
- · Offer telehealth for those with access barriers.
- Refer pregnant patients with a history of cardiac disease to maternal and fetal medicine specialists.
- Follow American College of Obstetricians and Gynecologists (ACOG) guidelines for managing obesity and cardiac conditions during pregnancy.



Hospital and facility recommendations

- Implement systematic protocols for managing severe hypertension during pregnancy
- Use Hear Her campaign materials in patient education efforts.
- Ensure patients and support persons understand discharge plans
- Train emergency department staff on managing cardiac and hypertensive disorders in pregnancy.
- Embed maternal early warning signs in electronic health records for closer monitoring



Health systems and policy maker recommendations

- Expand Medicaid and universal health care access to improve maternal health outcomes.
- Fund postpartum home visits by nurses for high risk patients.
- Implement flags in electronic health records to track postpartum status for one year after birth.
- Improve communication between dental and medical electronic records for better maternal care coordination.
- Support policies addressing food insecurity, environmental health risks, and housing stability for pregnant and postpartum individuals.
- Medical and nursing schools should implement ongoing training on medical charting and documentation that addresses issues of bias and discrimination in the medical record as well as in delivery of care.
- Medical and nursing schools and pipeline programs should work to increase diversity in the health care workforce as an important factor for eliminating inequities in health care.
- Payers should incentivize health systems to provide in-person culturally competent care coordinators from diverse backgrounds as part of the care team for complex patients to make sure all health care needs are addressed..



Community recommendations

- Promote maternal early warning signs awareness using the Hear Her® campaign, Centers for Disease Control and Prevention's (CDC) efforts to prevent pregnancy- related deaths by sharing potentially life-saving messages about urgent maternal warning signs.
- Connect socially-isolated individuals to support groups and services.
- Continue public health efforts to prevent obesity and chronic disease across lifespan.
- Provide emotional and social support (wraparound services).





Meet Dr. Allexa Allyn Licon

What is your current role?

I am Dr. Licon, a Clinical Assistant Professor and Non-Invasive Cardiologist at the University of Wisconsin School of Medicine and Public Health. My specialty lies in Cardio-Obstetrics, where I focus on managing cardiovascular health throughout the preconception, pregnancy, and postpartum periods. It's my passion to provide comprehensive care and support to individuals during these critical stages of their lives

What got you interested in becoming a Cardiologist? What inspired you to get involved in perinatal care?

During my Internal Medicine residency, I became deeply interested in Cardiovascular Medicine, especially due to disparities in cardiovascular outcomes among diverse patient populations, including Black women. This inspired me to pursue a career in Cardiology to advocate for those at highest risk.

In my fellowship, I delved into Cardio-Obstetrics, where I found alarming racial disparities in pregnancy-related cardiovascular complications, particularly affecting Black maternal health. This motivated me to specialize in Cardio-Obstetrics, aiming to address and reduce these disparities in maternal cardiovascular health.

What do you love most about your job?

It's immensely rewarding to witness patients with conditions like chronic hypertension successfully navigate pregnancy and postpartum with the support of our Cardio-Obstetrics team. Knowing that my contributions help mitigate pregnancy-related cardiovascular risks is a privilege.

What are some of the common cardiovascular complications of pregnancy that you see? Are there racial disparities in these conditions? Are these conditions preventable?

The most common cardiovascular complications during pregnancy and postpartum are hypertensive disorders, including preeclampsia and chronic hypertension with superimposed preeclampsia. Unfortunately, racial disparities exist, with Black women more susceptible.

Factors such as health care disparities, biases, and risk factor prevalence contribute. Adequate preconception counseling, multidisciplinary care, and telehealth monitoring can help mitigate risks.

How can birthing individuals and families reduce the risk of cardiovascular conditions during pregnancy? What broader advice would you give to community advocates and public health professionals on how to reduce disparities?

For individuals at risk or with an established cardiovascular condition, pre-conception counseling with a Cardio-Obstetrics team offers a chance to discuss pregnancy risks, transition to safe medication regimens, and optimize factors like blood pressure control. It's important for birthing individuals and their families to ensure their concerns are heard by their health care team, as dismissals of symptoms can lead to delays in diagnosis and treatment—a systemic health care issue.



Meet Dr. Allexa Allyn Licon, continued

Advocacy from family, friends, or Doulas can be crucial. I recommend exploring the CDC's Hear Her® campaign, which educates about pregnancy complications and empowers birthing individuals and their support networks to seek timely help and advocate effectively within the health care system.

From a personal and professional standpoint, why are you so passionate about this topic?

Pre-conception counseling with a Cardio-Obstetrics team allows for discussing pregnancy risks and optimizing factors like blood pressure control. It's crucial for birthing individuals and families to ensure their concerns are heard by their health care team, as dismissals of symptoms can lead to delays in diagnosis and treatment. Advocacy from family, friends, or Doulas is vital.

I recommend exploring the CDC's HEAR HER campaign, which educates about pregnancy complications and empowers birthing individuals to seek timely help and advocate effectively. As a Black woman and Cardiologist, I'm deeply aware of the disparities in adverse maternal cardiovascular outcomes negatively impacting Black women. The US has the highest maternal mortality rate among industrialized countries, with Black women three times more likely to die from pregnancy-related complications than White women.

These disparities persist regardless of educational or socioeconomic status, reflecting systemic biases and racism. Addressing these contributors is essential to reducing the maternal mortality rate, and I'm grateful to contribute to these efforts using my knowledge and experiences.

What positive things are you seeing happening related to this topic? What successes should we build on? What things are there to celebrate?

In recent years, there's been heightened awareness of the rising maternal mortality rate in the United States. The Cardio-Obstetrics field is gaining recognition and support within the health care community, with numerous local, regional, and national organizations emerging to raise awareness of maternal mortality and cardiovascular outcome disparities.

Funding for research in Cardio-Obstetrics is also increasing, reflecting a growing interest in addressing these issues. It's encouraging to see impactful actions being taken to improve maternal health outcomes nationwide, and momentum appears to be growing.







Resources

In addition to highlighting data and raising awareness toward inequities, it is important to also celebrate positive work that is happening across our state in the field of maternal and child health.

Community organizations and programs play a critical role in improving maternal health by providing information, fostering social support networks, addressing inequities, coordinating care, and empowering those who are pregnant. These programs are essential in ensuring that all pre- and post-partum people have access to the resources, support, and care they need for a healthy pregnancy, childbirth, and postpartum period.

The following highlight just a couple key organizations and efforts working to address disparities, empower pre- and postpartum people as advocates, and serve as a bridge between health care providers, social services, and support organizations.

Black Mamas Matter Alliance is a national network of Black women-led and Black-led, birth and reproductive justice organizations and multi-disciplinary professionals, working across the full-spectrum of maternal and reproductive health.

Think Cultural Health offer Culturally and Linguistically Appropriate Services (CLAS) in Maternal Health Care. This free, two-hour e-learning program is designed for providers and students seeking knowledge and skills related to cultural competency, cultural humility, person-centered care, and combating implicit bias across the continuum of maternal health care.

HEAR HER Campaign (CDC) shares potentially life-saving messages about urgent maternal warning signs. The campaign includes resources for women who are pregnant or postpartum, their partners, and the health care professionals who interact with them.

Wisconsin legislator directory

Find your <u>legislators online</u> by entering your address into the search bar or click a location on the map.









Reflection

Seven key questions to reduce maternal mortality

- After reviewing this report, what are some of the data trends that stood out to you?
- Were there any key contributing factors that surprised you? If so, which ones and why?
- After reviewing the recommendations included in this report, what are the top two that seem feasible for your organization to implement in the next 60–90 days? What are the top two that are feasible for your organization to implement over the next year?
- Racism and discrimination play a role in many of the pregnancy-associated deaths in Wisconsin. What tangible steps can you take to combat this?
- After reviewing this report, which community or system-based partners can you commit to developing a relationship with and/or strengthening in order to implement some of the key recommendations?
- What are areas of promise or hope you see happening in your organization or surrounding community as it relates to maternal mortality prevention? What things are already working well you can support and/or bring awareness to?
- How do you plan to ensure accountability and follow-up on the implementation of the recommendations outlined in this report within your organization or community?

What is the Wisconsin Maternal Mortality Review Program?

The Wisconsin Maternal Mortality Review (MMR) Program works to review and increase awareness around deaths of individuals who died during pregnancy or within one year postpartum.

The overall mission is for partners to use this data to save lives. The MMR Program consists of Wisconsin Department of Health Services (DHS) staff as well as public health cand health care experts who convene as the Maternal Mortality Review Team (MMRT) and Impact Team.

Maternal Mortality Review Team (MMRT): Wisconsin's MMRT meets every other month to review the information abstracted from records from the State Vital Records Office, coroners and medical examiners, law enforcement, and health care providers. Learn more about MMRT membership, including the MMRT co-chairs Drs. Jasmine Zapata and Jacquelyn Adams.

Maternal Mortality Impact Team: In 2022, the MMR Program launched the MMR Impact Team, a team of public health and health care experts who meet quarterly to identify critical action steps for disseminating and implementing MMRT recommendations. The focus of the MMR Impact Team is to move from data to action and assist with generating regular issue briefs.

Contact

Wisconsin Department of Health Services

Maternal Mortality Review

201 E. Washington Ave. Madison, WI. 53703

Email: DHSMMR@dhs.wisconsin.gov



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The recommendations in this brief reflect the views and opinions of the Maternal Mortality Review Team. They may not reflect the official policy or position of the Wisconsin Department of Health Services.

