

# Wisconsin Maternal Mortality Review

Recommendations Report  
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WISCONSIN DEPARTMENT  
*of* HEALTH SERVICES

Maternal mortality is a key indicator of the quality of women's health and health care. Every maternal death represents not just the loss of a woman's life, but the impact of that loss on her family and community. Though maternal health in the United States has improved greatly during the past century, recent increases in pregnancy-related deaths and significant racial disparities in maternal health demonstrate the opportunity for systematic improvements in the care of pregnant women and mothers.

Each year, at least 25 Wisconsin women die during or within one year of pregnancy. The State of Wisconsin has a multidisciplinary Maternal Mortality Review Team dedicated to reviewing cases of maternal mortality. The Maternal Mortality Review Team strives to understand the circumstances surrounding each death, with the goal of identifying system gaps and other opportunities for the prevention of future maternal deaths.

This report summarizes key observations and recommendations from the Wisconsin Maternal Mortality Review Team. A scenario is presented for each topic to provide an example of the sorts of challenges that are often faced by pregnant women and mothers. The scenarios do not describe an actual case, but each one represents the types of cases the team reviews related to that topic and is a composite of many cases reviewed by the team in the past few years. We hope that the issues, scenarios, and recommendations that follow in this report will serve as a call to action to identify real steps that can be taken to improve the health and health care of women and mothers in our state.

### Did you know?

- Approximately 25 Wisconsin women die each year during or within one year of pregnancy.
- Leading causes of maternal deaths related to pregnancy include cardiac, infection, hemorrhage, clots, and embolic events.
- Pregnancy-related mortality for non-Hispanic black mothers is 5 times the rate for non-Hispanic white mothers.
- Of pregnancy-related maternal deaths, more than 2 out of 3 occur postpartum.

Source: A Review of Pregnancy-Related Maternal Mortality in Wisconsin, 2006-2010. Schellpfeffer, et al. *Wisconsin Medical Journal*. 2015;114(5):202-7.



## Chronic Disease

### Issue

Women who enter pregnancy with chronic diseases that are not well-managed may experience a worsening of their condition during pregnancy, leading to worsening health of the mother and baby.

### Scenario

A woman with a history of obesity delivered a healthy baby. Two months after delivery, she was diagnosed with postpartum cardiomyopathy. One week later, she arrived at the hospital with complaints of shortness of breath which were diagnosed as congestive heart failure. Her heart function rapidly declined upon admission, and she died three days later.

### Recommendation

Women with chronic diseases often require specialty care and careful management of their conditions before, during, and after pregnancy. Family planning services should be utilized to allow for a planned pregnancy where chronic health conditions can be appropriately and safely managed.

## Continuity of Care

### Issue

Women may not receive well-coordinated care, leading to missed opportunities for ongoing, integrated management of their needs for health and other services.

### Scenario

A mother with hypertension during pregnancy did not attend her scheduled postpartum visit. No follow-up from the clinic was reported to reschedule her visit or reconnect her with her primary care provider. Six months later, she suffered a stroke due to uncontrolled high blood pressure.

### Recommendation

Special attention should be given to assure that mothers transition smoothly to prenatal and postnatal care. Additionally, women should be reconnected with a primary care physician after their postpartum visit to resume routine, preventive medical care. Increased access to health services after delivery promotes successful care transitions.

## Mental Health

### Issue

Women suffering from existing mental health issues or with a history of previous mental health issues may not get the services they need. Without these services, women are at a higher risk before, during, and after pregnancy.

### Scenario

A mother entered pregnancy with a history of depression, self-harm, and a previous suicide attempt. She was depressed after pregnancy and expressed second thoughts about motherhood. Six months postpartum, her husband arrived home from work and found her unresponsive with a self-inflicted gunshot wound to the head.

### Recommendation

All women should be screened for mental health issues and suicide risk before, during, and after pregnancy to identify risk. Women with risk for suicidality need to be linked to services to assure ongoing screening and appropriate support and intervention.

## Risk-Appropriate Care

### Issue

Pregnant women at high-risk should receive care in facilities able to provide the level of care that is required for their pregnancy to reduce maternal morbidity and mortality.

### Scenario

A woman living in a rural area had a complex pregnancy history, including a prior C-section birth, morbid obesity, and current placenta previa. The complications of her planned, full-term delivery at a Level I facility included severe hemorrhaging that her delivery facility was unable to control. She died two hours after delivery.

### Recommendation

Women, especially those in rural areas, should be evaluated early in pregnancy and encouraged to give birth at a facility that meets the needs and the risk level of their pregnancy. Factors to be considered include whether the facility is appropriately equipped and staffed to deliver the care needed by a woman with a complex pregnancy or chronic conditions such as morbid obesity. All birthing facilities should complete a comprehensive and validated assessment to identify their level of obstetric and neonatal care.

## Substance Use

### Issue

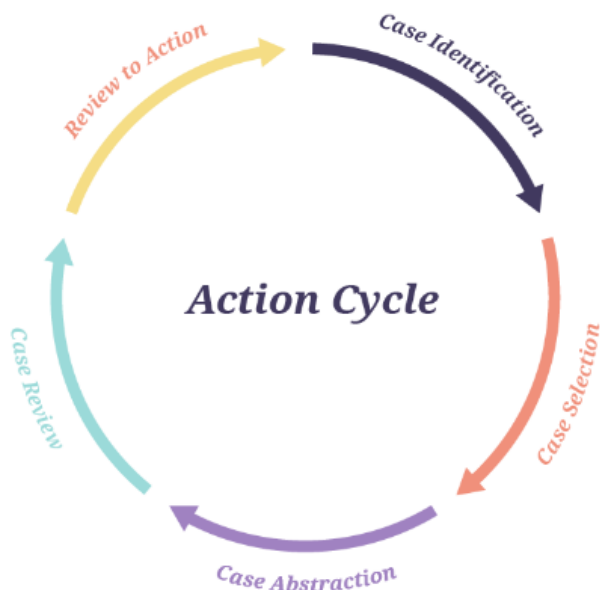
Women with substance use issues, such as opioid use disorder, have higher rates of unplanned pregnancies, and many women do not have the necessary support, treatment, and resources to address their drug use before, during, and after pregnancy.

### Scenario

A mother with a history of alcoholism and heroin use had an unplanned pregnancy. She was unable to access treatment during pregnancy because services were unavailable due to extended wait times to get an appointment. After pregnancy, her problems with drug use resumed and worsened. Four months postpartum, she was found dead in her living room due to an accidental heroin overdose.

### Recommendation

A variety of care and treatment options need to be available for women before, during, and after pregnancy. Family planning services and substance use treatment for women of reproductive age should be utilized to prevent substance-exposed pregnancies.



A key function of maternal mortality review is to move findings and recommendations to action.

Action cycle graphic from <http://www.reviewtoaction.org/>

# Maternal Mortality in Wisconsin: A Call to Action

The Wisconsin Maternal Mortality Review Team has identified five focus areas for improvement based on common themes in the cases reviewed.

## Chronic Disease

Women with chronic diseases often require specialty care before, during, and after pregnancy. Management of these chronic conditions should be noted during the transition periods of prenatal and postpartum care to ensure adequate management.

## Continuity of Care

Special attention should be given to assure that mothers transition smoothly to prenatal and postnatal care. All women should be reconnected with a primary care physician to resume routine care after pregnancy.

## Mental Health

All women should be screened for mental health issues before, during, and after pregnancy. Screening all women results in more women receiving referrals to access the services necessary to address their mental health needs.

## Risk-Appropriate Care

Women should be evaluated early in pregnancy and recommended to give birth at a facility that meets their pregnancy risk level needs. All birthing facilities should complete the Wisconsin Association for Perinatal Care comprehensive and validated self-assessment of their obstetric and neonatal care levels. At the time of this report, only half of Wisconsin hospitals have completed this assessment.

## Substance Use

Increased availability of care and treatment services is needed for women before, during, and after pregnancy. Referrals to family planning services and substance use treatment for women of reproductive age should be utilized to prevent substance-exposed pregnancies.

For more information...

Wisconsin Department of Health Services, Maternal Mortality and Morbidity-

<https://www.dhs.wisconsin.gov/mch/maternal-mortality-and-morbidity.htm>

Wisconsin Perinatal Quality Collaborative (WisPQC)- <https://wispqc.org/>

Review to Action- <http://www.reviewtoaction.org/>

Council on Patient Safety in Women's Health Care- <http://safehealthcareforeverywoman.org/>