

# South Carolina Maternal Morbidity and Mortality Review Committee

2026 Legislative Brief

South Carolina Maternal Morbidity and Mortality Review Committee Co-Chairs:  
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The South Carolina Maternal Morbidity and Mortality Review Committee (SCMMMRC) was established by law in 2016 under Act 42 of the South Carolina Statute Section 44-1-310. In accordance with the Act, the Committee must review all maternal deaths that occur during pregnancy or within 365 days after the pregnancy ends, regardless of the cause of death, and compile and distribute an annual report by March 1. Each death is reviewed using a standardized approach, which involves investigating underlying causes, pregnancy-relatedness, preventability, and any circumstances or other contributing factors. The Committee's responsibility is to identify recommendations to prevent future maternal mortality.

## Goals



Determine the annual number of pregnancy-related deaths in SC.



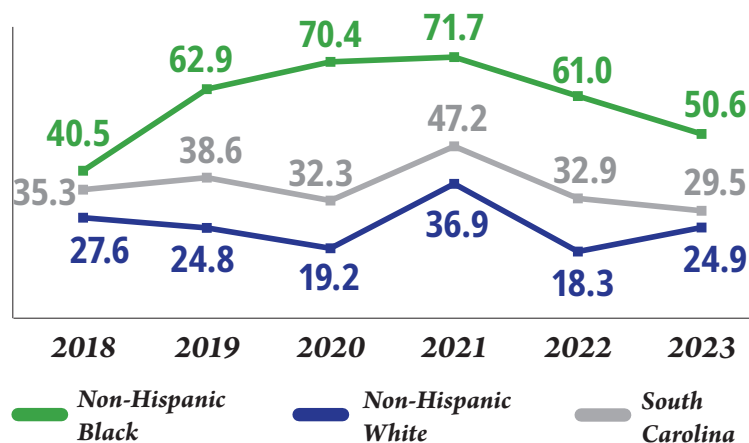
Identify trends and risk factors among preventable pregnancy-related deaths in SC.



Develop actionable recommendations for prevention and intervention.

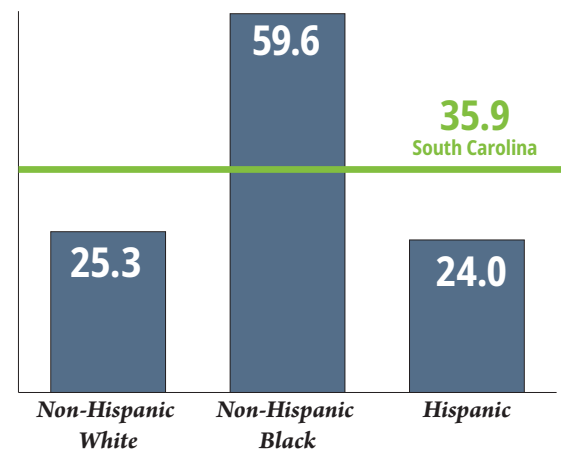
## Trend in Pregnancy-Related Mortality Rate, by Race and Ethnicity

Rate per 100,000 live births, 2018-2023



## Pregnancy-Related Mortality Rate, by Race and Ethnicity

Rate per 100,000 live births, 2018-2023

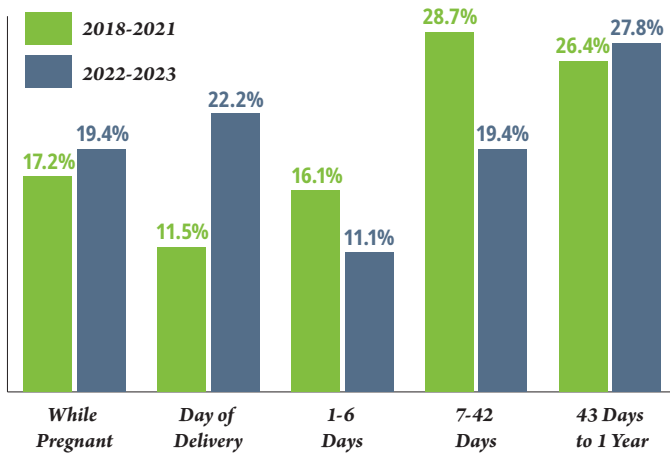


In 2025, the SCMMMRC identified 66 deaths from 2022 and 74 deaths from 2023; 19 and 17 of the deaths, respectively, were determined to be pregnancy-related (PR). A PR death occurs when a woman dies from a pregnancy complication, a chain of events initiated by the pregnancy, or a condition made worse by the pregnancy.

In 2022, the SC Pregnancy-Related Mortality Rate (PRMR) decreased by 30% from 2021 before dropping 10% further in 2023. In 2023, SC reported its lowest PRMR since the beginning of surveillance (29.5). Overall, from 2018-2023, the PRMR differed by race and ethnicity (59.6 for Non-Hispanic Black, 25.3 for Non-Hispanic White, and 24.0 for Hispanic mothers). Though the PRMR for Non-Hispanic Black (NHB) women was twice that of Non-Hispanic White (NHW) women in 2023, the PRMR for NHB has dropped notably since 2021 (29%).

## Timing of Pregnancy-Related Deaths

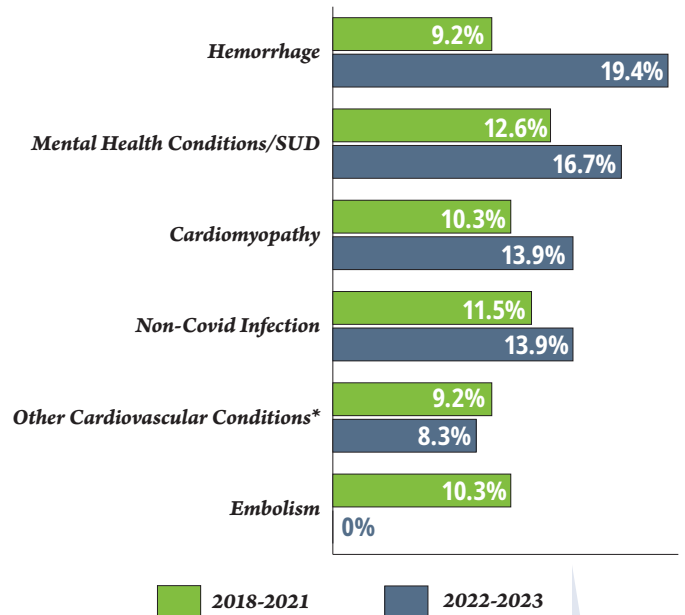
Percent of pregnancy-related deaths, 2018-2023



In 2022 and 2023, there was a notable increase in deaths occurring day of delivery (hemorrhage as leading cause). There was a decrease in deaths during the first six weeks postpartum in 2022 and 2023, with the primary causes being infection or hypertensive disorders. From both 2018-2021 and 2022-2023, the primary causes of death after 43 days were mental health conditions/substance use disorder (SUD), and cardiomyopathy.

## Leading Causes of Pregnancy-Related Deaths, by Year

Percent of pregnancy-related deaths, 2018-2023



\*Other cardiovascular conditions is separate from cardiomyopathy due to different root causes with respect to pregnancy.

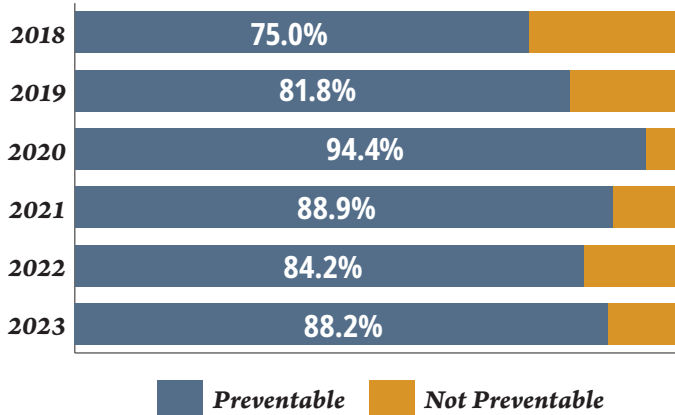
- ⚠ *The cause of PR death refers to the specific underlying medical condition or event that directly led to the person's death. This is typically determined through clinical records, autopsy reports, death certificates, and family interviews.*
- ⚠ *The leading cause of death from 2018-2023 was mental health conditions/SUD (13.8%). However, combined, cardiomyopathy and other cardiovascular conditions made up 20.3% of PR deaths.*
- ⚠ *The leading cause of death in 2022 was hemorrhage (a notable increase). In 2023, the leading cause of death was mental health conditions/SUD.*

## Leading Causes of Death in 2022-2023, Stratified by Demographic Characteristics

Race and Ethnicity	Rurality	Payor Source
<b>Non-Hispanic Black</b> <ul style="list-style-type: none"> <li>Cardiomyopathy</li> <li>Hypertensive Disorder</li> <li>Hemorrhage, Infection</li> </ul>	<b>Rural</b> <ul style="list-style-type: none"> <li>Cardiomyopathy</li> <li>Injury, Other Cardiovascular, Metabolic/Endocrine, Pulmonary Conditions</li> </ul>	<b>Medicaid</b> <ul style="list-style-type: none"> <li>Hemorrhage, Infection</li> <li>Cardiomyopathy</li> <li>Mental Health Conditions/SUD</li> </ul>
<b>Non-Hispanic White</b> <ul style="list-style-type: none"> <li>Mental Health Conditions/SUD</li> <li>Hemorrhage</li> <li>Infection, Other Cardiovascular</li> </ul>	<b>Urban</b> <ul style="list-style-type: none"> <li>Hemorrhage</li> <li>Infection, Mental Health Conditions/SUD</li> <li>Hypertensive Disorder</li> </ul>	<b>Private</b> <ul style="list-style-type: none"> <li>Mental Health Conditions/SUD, Other Cardiovascular</li> <li>Cardiomyopathy, Hemorrhage, Hypertensive Disorder</li> </ul>

## Preventability of Pregnancy-Related Deaths

Percent of pregnancy-related deaths, 2018-2023

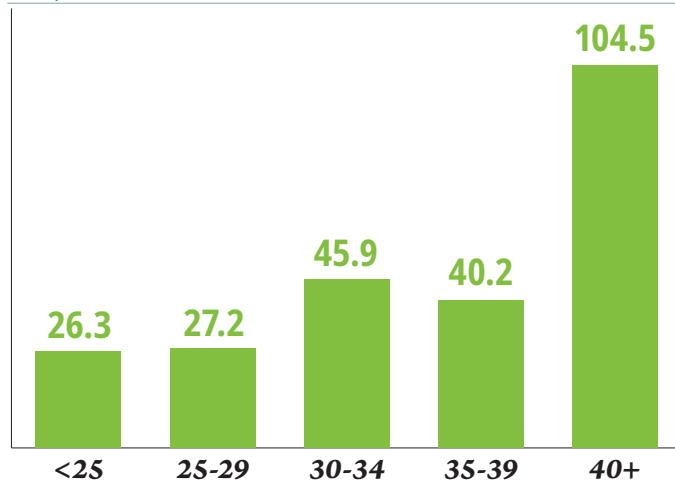


A death is considered preventable if the Committee determines there was at least some chance of the death being averted by one or more reasonable changes. Changes may occur at the patient/family, provider, facility, system, or community levels and can be associated with various contributing factors.<sup>1</sup> For example, increasing knowledge on urgent maternal warning signs can help identify a PR condition for quick diagnosis and treatment.

In 2022-2023, mental health conditions/SUD, hypertensive disorders, and hemorrhage deaths were all determined to be 100% preventable. Cardiomyopathy and infection were preventable 80% of the time. Preventability differed moderately by race/ethnicity (78.6% in NHW; 88.9% in NHB).

## Pregnancy-Related Mortality Rate, by Age

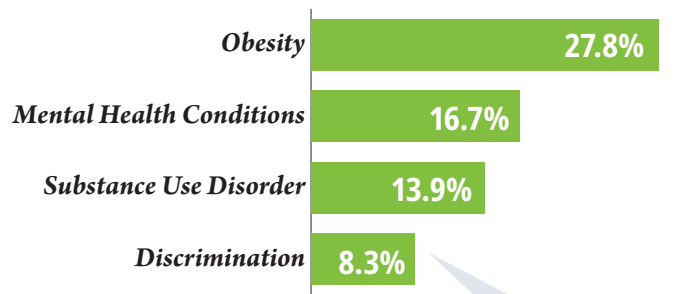
Rate per 100,000 live births, 2018-2023



The PRMR drastically increases for women 40 years or older with 104.5 deaths per 100,000 live births.

## Circumstances of Pregnancy-Related Deaths

Percent of pregnancy-related deaths, 2022-2023



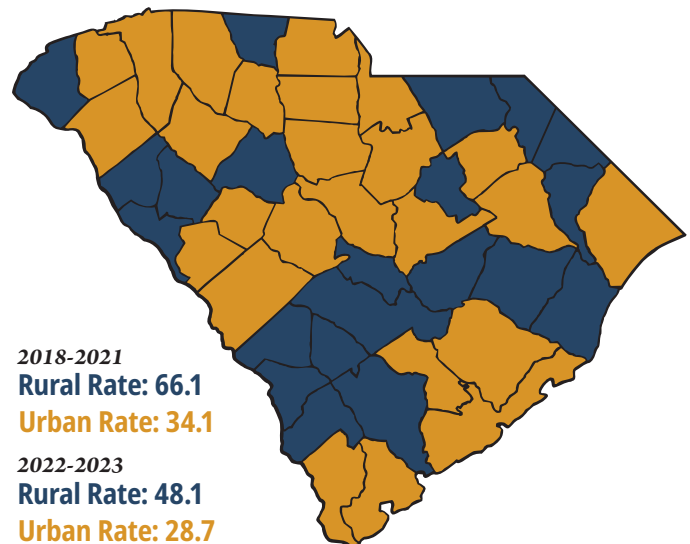
### Discrimination

The possibility of discrimination is described as treating someone less or more favorably based on the group, class, or category they belong to resulting from biases, prejudices, and stereotyping. It can manifest as differences in care, clinical communication, and shared decision-making.<sup>2</sup>

Circumstances of PR deaths refers to the broader social, behavioral, or systemic factors that contributed to the death that help provide additional context of contributing factors.

## Pregnancy-Related Mortality Rate, by Urban and Rural Designation\*

Rate per 100,000 live births, 2018-2023

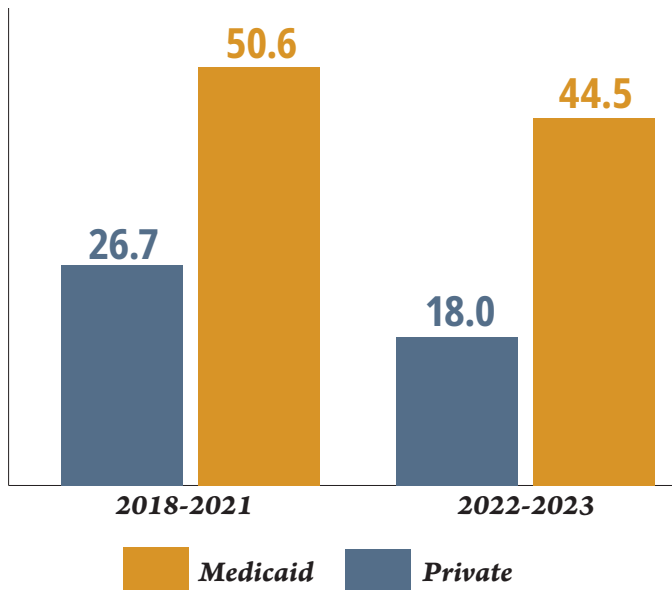


The PRMR for women residing in rural counties<sup>3</sup> was 94% higher than for urban counties (66.1 and 34.1, respectively) from 2018-2021 and dropped to 68% higher in 2022-2023 (48.1 and 28.7, respectively).

\*Designations based on the 2020 Census Bureau definition of rurality.

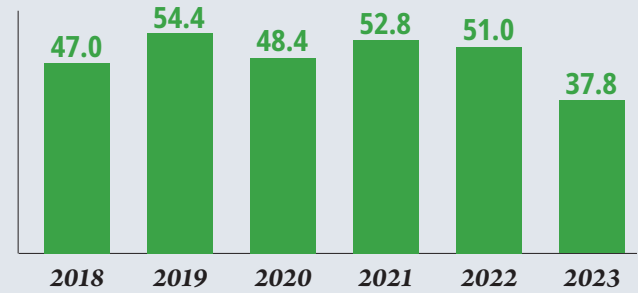
## Pregnancy-Related Mortality Rate, by Payor Source

Rate per 100,000 live births, 2018-2023



## Trend in Pregnancy-Related Mortality Rate Among Medicaid Recipients

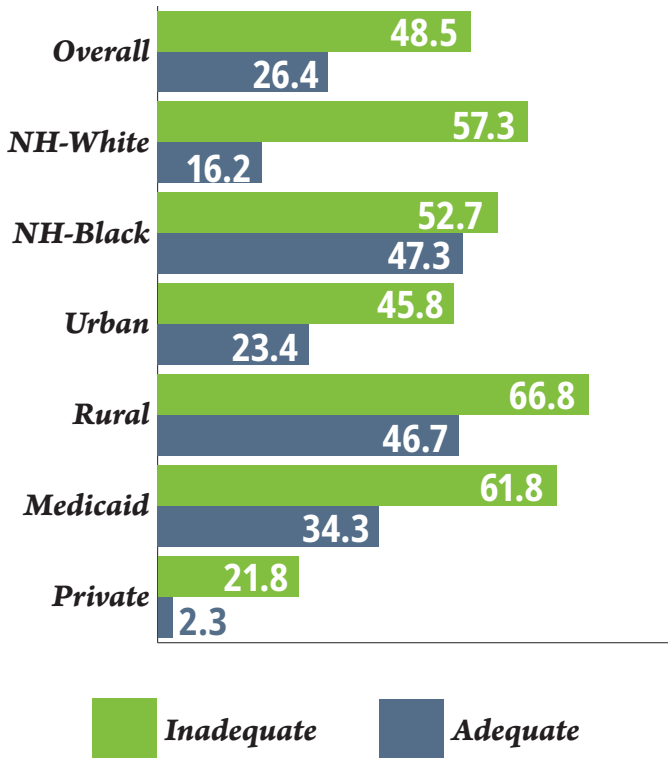
Rate per 100,000 live births, 2018-2023



In April 2022, South Carolina extended Medicaid coverage from 60 days postpartum to a full year, which may help explain the notable decrease in Medicaid deaths in 2023 after persistently high rates in prior years.

## Pregnancy-Related Mortality Rate, by Prenatal Care Adequacy\* and Demographics

Rate per 100,000 live births, 2018-2023



The PRMR for mothers with inadequate PNC was nearly twice that of mothers with adequate PNC (48.5 and 26.4, respectively), with a similar relationship by rurality and payor source. By race/ethnicity, NHW mothers with inadequate PNC had 3.5 times the PRMR of those with adequate, while the rates for NHB mothers were not notably different by PNC adequacy (52.7 and 47.3, respectively).

From 2018-2022, South Carolina had the 8th highest PRMR in the United States.<sup>5</sup>

\*Prenatal care (PNC) adequacy was measured using the Kotelchuck Index for mothers with at least 18 weeks gestation.<sup>4</sup>

## Key Takeaways



*The 2023 overall PRMR was the lowest since the establishment of the SCMMMRC. The overall PRMR decreased by 38% from 2021 to 2023, but NHB mothers were still twice as likely to die in 2023 compared to NHW mothers.*



*Hemorrhage, mental health conditions/substance use disorder, cardiomyopathy, and infection were the leading causes of PR deaths from 2022-2023.*



*The PRMR was 68% higher in rural counties than in urban counties in 2022-2023.*

## SCMMMRC Implementation Wins

South Carolina hospitals have implemented safety bundles for hypertension and hemorrhage, which are a standardized evidence-based care process to prevent morbidities or mortality after birth. The SC Maternal Health Taskforce is implementing the PALMETTO-BIRTH Band initiative, a postpartum alert bracelet, to ensure providers are aware of a recent pregnancy to provide appropriate care during the postpartum period. Another component of this initiative is to provide obstetric simulation training to emergency department staff.

## Summary

The SCMMMRC has identified several disproportionately affected populations that experienced a pregnancy-related death from 2022-2023, including NHB women, rural county residents, and women affected by mental health conditions or substance use disorder. Hemorrhage was the leading cause of death from 2022-2023, followed closely by mental health conditions/substance use disorder, cardiomyopathy, and infection. South Carolina saw notable decreases in pregnancy-related mortality from 2021 to 2023, especially among NHB mothers, but disparities remain high. The SCMMMRC is committed to the continued improvement of maternal health outcomes and eliminating preventable maternal deaths.

### Citations:

1. [https://www.cdc.gov/maternal-mortality/php/data-research/mmrc/?CDC\\_AAref\\_Val=https://www.cdc.gov/maternal-mortality/php/data-research/mmrc-2017-2019.html](https://www.cdc.gov/maternal-mortality/php/data-research/mmrc/?CDC_AAref_Val=https://www.cdc.gov/maternal-mortality/php/data-research/mmrc-2017-2019.html)
2. <https://pubmed.ncbi.nlm.nih.gov/25032386/>
3. <https://www.federalregister.gov/documents/2022/03/24/2022-06180/urban-area-criteria-for-the-2020-census-final-criteria>
4. <https://apps.dhec.sc.gov/Health/Scan/scan/mch/infantmortality/support/infmdefn.aspx>
5. <https://www.cdc.gov/nchs/maternal-mortality/mmr-2018-2022-state-data.pdf>

## Recommendations

**Recommendations from the SCMMMRC are strategies to improve maternal outcomes. Key Committee recommendations from the review of preventable pregnancy-related deaths that occurred during 2022 and 2023 are provided below by contributing factor:**

**Access:** SC should fund mobile units that provide prenatal and postpartum care to women in rural communities. Pregnant women should establish prenatal care within the first trimester of pregnancy. Postpartum women should attend postpartum follow up appointments. Women should be provided access assistance with regards to transportation and childcare to attend appointments and medical services.

**Care Coordination:** SC should explore the use of Community Health Workers and doulas to augment the women's health care team. All pregnant and postpartum women should be assisted with establishing a primary care provider. Women with chronic conditions should have preconception counseling and their condition should be managed appropriately prior to pregnancy. Care coordination among obstetric providers and specialists during pregnancy, birth, and the postpartum period can optimize care in women with chronic conditions to include mental health conditions and/or substance use disorder.

**Clinical Skill:** Women with a history or family history of cardiac disease should have an echocardiogram. Obstetric providers should be educated on hypertensive management of pregnancy, and management of anemia in the third trimester of pregnancy. Emergency Department (ED) providers and staff should be trained on the management of pregnancy and postpartum complications.

**Delay:** To optimize hemorrhage management, medications and/or blood product administration and operative decisions should not be delayed.

**Knowledge:** All providers and hospitals should extensively educate pregnant and postpartum women and their families about Urgent Maternal Warning Signs. Providers should educate women about symptoms and treatment for ectopic pregnancies, which occur outside the uterus. Providers and staff should receive simulation-based training modules for hemorrhage and hypertension in pregnancy and the postpartum period. The use of a hemorrhage safety bundle can provide guidance during an emergency. Women of childbearing age with complex medical conditions should be counseled on contraception. All providers and hospitals should be trained in respectful care. SC should implement a statewide postpartum alert bracelet program.

**Mental Health Conditions:** Communities should provide outreach to women about perinatal suicide and resources for mental health/substance use disorder support. Providers should screen for depression in each trimester and in the postpartum period. SC should adopt a bridge to care model to help women with mental health conditions coordinate care between inpatient, outpatient, and medication assisted treatment.

**Policies/Procedures:** Facilities should have a policy that encourages a consultation to an obstetric provider if a postpartum woman presents to the ED. SC hospitals should use quantified blood loss methods and document accordingly. Blood products should be readily available at any facilities that have a delivering obstetrics unit. Facilities should have a policy for postpartum hemorrhage management. If a woman dies while pregnant, during delivery, or within one year of the end of pregnancy, an autopsy should be considered.

**Referral:** Women with a high-risk pregnancy should have a referral to Maternal Fetal Medicine. Women who have complex medical or behavioral health conditions should receive referrals to specialists. Providers should consider a referral for a postpartum home visit for women at a higher risk of complications or women who reside in a rural county.

**Substance Use Disorder:** Peer Support Specialists and Peer Support Doulas can offer support, education and resources to women with a history of substance use disorder. Women in recovery should be followed closely and offered treatment modalities to include medication monitoring, counseling, and resources. SC should educate the public as to the location of community distribution services to obtain Narcan. SC should adopt an access to treatment model instead of a punitive approach for women with substance use disorder and promote destigmatization.