South Carolina Maternal Morbidity and Mortality Review Committee

2024 LEGISLATIVE BRIEF

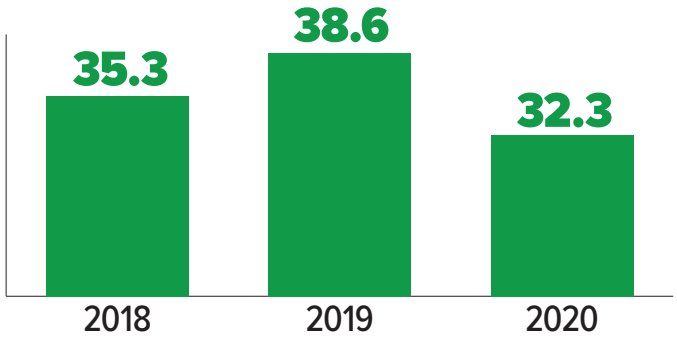
South Carolina Maternal Morbidity and Mortality Review Committee (SCMMMRC) reviews all maternal deaths that occur during pregnancy and up to 365 days following the end of the pregnancy regardless of the cause of death. Each death is reviewed using a standardized approach that includes investigating underlying causes of death, pregnancy-relatedness, preventability, circumstances and contributing factors surrounding the death.

Goals

- **Determine the annual number of pregnancy-associated deaths that are pregnancy-related.**
- **Identify trends and risk factors among preventable pregnancy-related deaths in SC.**
- **Develop actionable recommendations for prevention and intervention.**

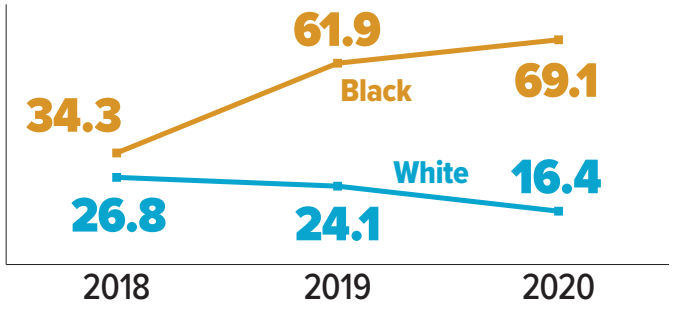
Pregnancy-Related Mortality Rate, by Year

Rate per 100,000 live births



Pregnancy-Related Mortality Rate, by Race

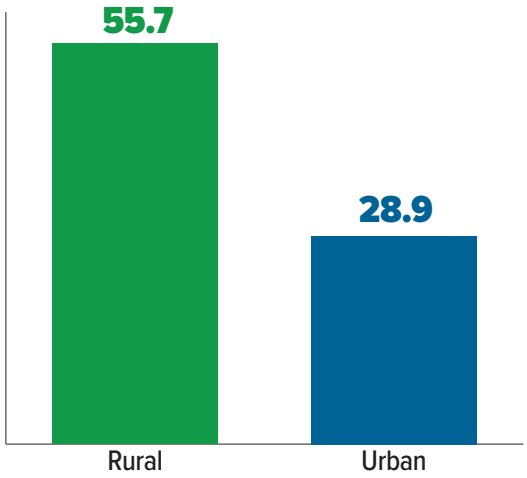
Rate per 100,000 live births



There are several factors that lead to delays in reviews of maternal death records, such as receiving records in a timely manner. **In 2023, the SCMMMRC completed the review of 79 deaths occurring in 2020; 18 of the deaths were determined to be Pregnancy-Related (PR).** A PR death occurs when a person dies from a pregnancy complication, a chain of events initiated by the pregnancy, or a condition made worse by the pregnancy. **In 2020, the SC Pregnancy-Related Mortality Rate (PRMR) was 32.3 PR deaths per 100,000 live births, a 16.3% decrease from 38.6 in 2019. In 2020, Black women were 4.2 times more likely to die than White women.** SC ranks 8th highest for maternal mortality when compared to other states.

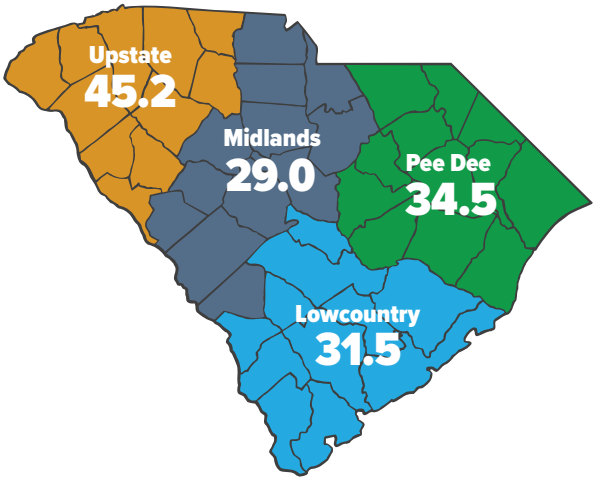
Pregnancy-Related Mortality Rate, by Rurality

Rate per 100,000 live births; 2018-2021



Pregnancy-Related Mortality Rate, by Region

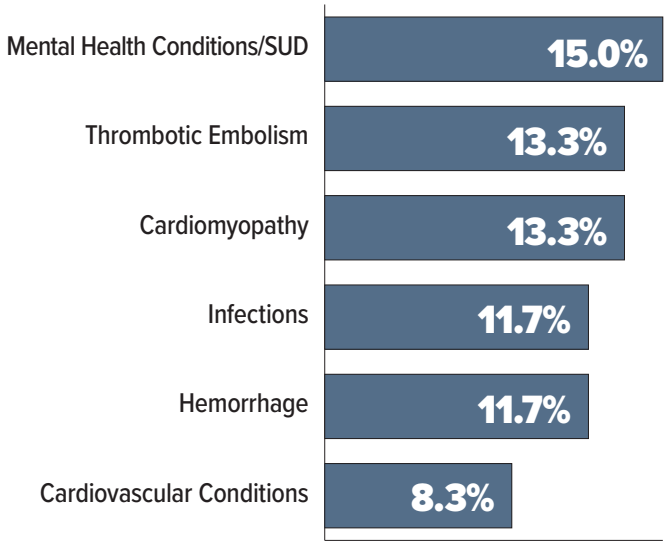
Rate per 100,000 live births; 2018-2020



The **Upstate region saw the highest rate of pregnancy-related deaths**. Additionally, PRMRs in **rural counties were nearly twice as high as those in urban counties.**

Leading Causes of Pregnancy-Related Deaths

Percent of pregnancy-related deaths; 2018-2020

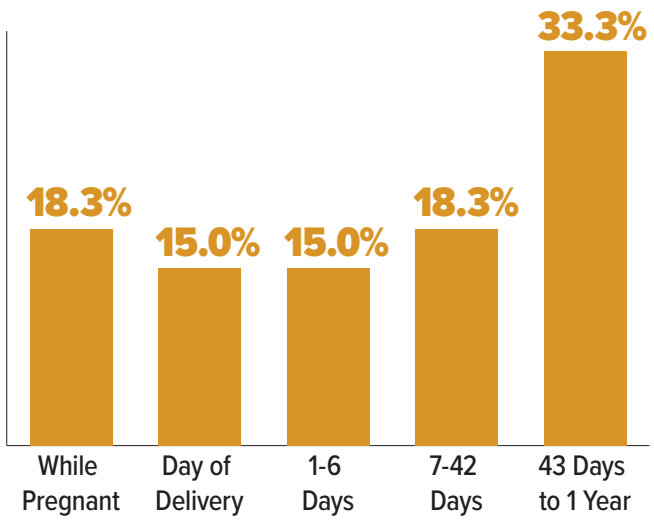


Pregnancy-Related Deaths in 2020

- ⚠ Mental Health Conditions/ Substance Use Disorder (SUD) continue to be a leading cause of death.
- ⚠ Cardiomyopathy, the leading cause of death in 2019, declined in 2020.
- ⚠ Thrombotic Embolism became a leading cause of death in 2020.

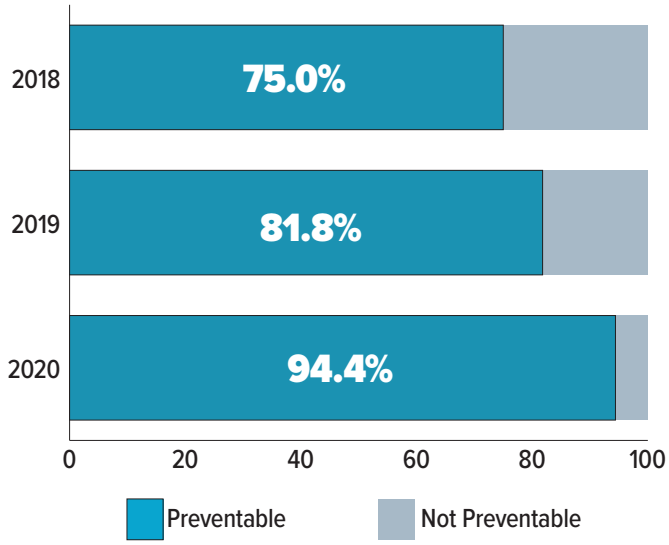
Timing of Pregnancy-Related Deaths

Percent of pregnancy-related deaths; 2018-2020



Preventability of Pregnancy-Related Deaths

Percent of pregnancy-related deaths; 2018-2020



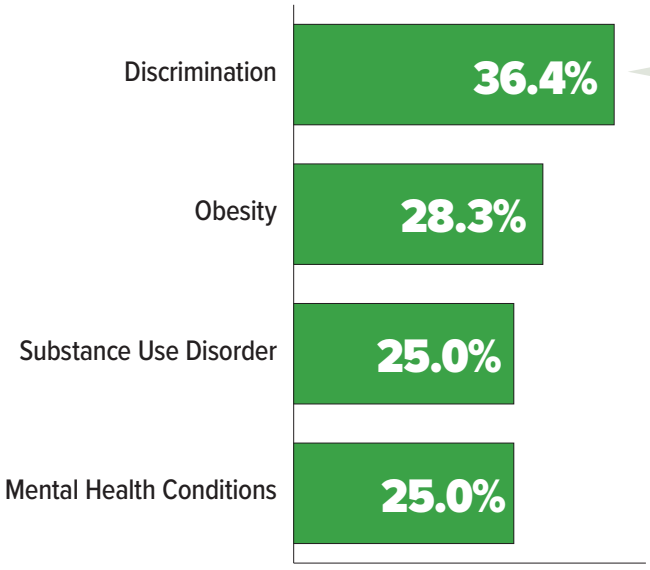
Among pregnancy-related deaths, 51.6% occurred between 7-365 days postpartum. The causes of death most likely to occur during this period were: mental health conditions, cardiomyopathy, and thrombotic embolism.

A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes. These changes may occur at the patient/family, provider, facility, system, or community level and may be associated with various contributing factors.[1]

The causes of death determined most likely to be preventable were mental health conditions/substance use disorder (100%) and thrombotic embolism (88%).

Circumstances of Pregnancy-Related Deaths

Percent of pregnancy-related deaths; 2018-2020

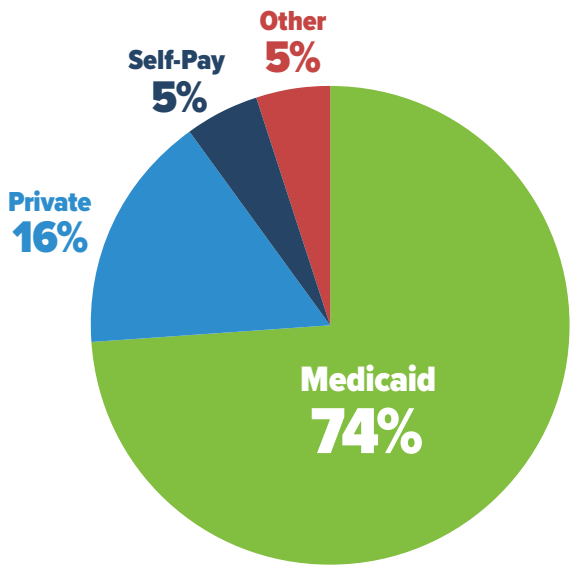


Discrimination

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.[2] **Discrimination was recognized as a contributing factor in more than one third of the pregnancy-related deaths reviewed.**

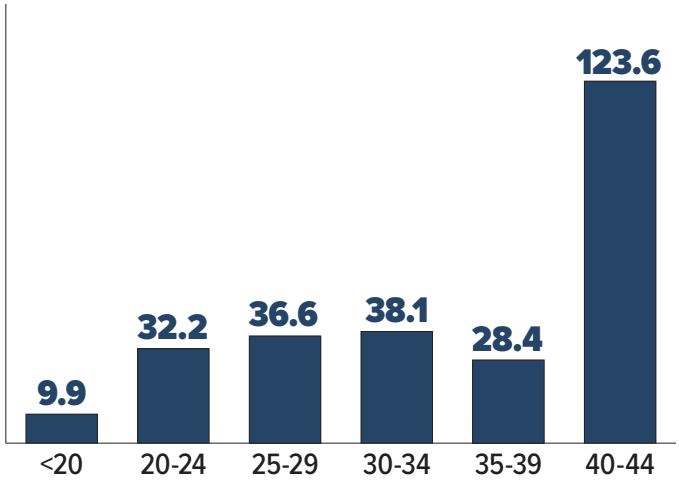
Pregnancy-Related Deaths, by Payor Source

Percent of pregnancy-related deaths; 2018-2020



Pregnancy-Related Mortality Rate, by Age

Rate per 100,000 live births; 2018-2020



During the time of this data collection, through 2020, Medicaid coverage ended at 60 days post-partum. With over 50% of PR deaths occurring in the post-partum period, we expect the 2022 extension of Medicaid until 365 days post- partum to enhance coverage for these women.

Key Takeaways

- **Pregnancy-related deaths declined**
- **Racial disparities widened**
- **Majority of pregnancy-related deaths occurred in the post-partum period**

Summary

In 2020, South Carolina saw a **16.3% decrease** in the overall pregnancy related mortality ratio, however the gap in **racial disparities widened with Black women** dying 4 times more than White women. The SCMMMRC is committed to improving maternal health outcomes and eliminating preventable deaths. The recommendations above will help achieve this goal. The 2022 SC extension of Medicaid coverage provides continued insurance coverage for mothers beyond the standard 6-week Ob/Gyn visit. This is an opportunity to establish a primary care provider and address health care needs like obesity, hypertension, mental health conditions, and substance use disorder.

Recommendations from the SCMMMRC are strategies to improve maternal outcomes.

Access: Access to obstetrical care should be improved in rural areas/counties. 11 out of the 31 rural counties do not have an OB provider.

Care Coordination: Providers should collaborate with behavioral health specialists when caring for pregnant/postpartum women with mental health/substance use disorders.

Clinical Assessment: All Obstetric and Emergency Department providers and staff and family practitioners should receive regular training and frequent updates on recognition and treatment of thrombotic embolism, cardiomyopathy, cardiovascular conditions, mental health conditions, hemorrhage, and substance use disorder in the setting of the obstetrical and post-partum patient.

Knowledge: Providers and facilities should provide education to pregnant and postpartum women, and their families about the urgent maternal warning signs and when to seek medical attention.

Policy and Procedure and Adherence: Providers and facilities should ensure that women have a scheduled post-partum follow up appointment within 1-3 weeks to assess for chronic and mental health conditions. Women should be strongly encouraged to attend their post-partum appointments.

Discrimination: SC Hospitals and Providers should mandate cultural competency training for providers and staff.

Policy and Procedure: All facilities are expected to have a DVT prevention protocol which includes DVT assessment and treatment in the pregnant and postpartum patient.

Referral: If a pregnant or postpartum patient does not have a primary care provider, a referral should be placed. Primary care providers can address chronic diseases such as obesity and hypertension that are associated with negative maternal health outcomes.

Coroner Recommendation: Autopsies should be ordered in compliance with the Ann Purdue Act of 2009-2010.

Citations:

1. Pregnancy Related Death: Data from Maternal Mortality Review Committees in 36 States, 2017-2019. Retrieved from https://reviewtoaction.org/tools/resourcecenter
2. Smedley et al, 2003 and Dr. Rachel Hardeman

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