South Carolina Maternal Morbidity and Mortality Review Committee

2025 LEGISLATIVE BRIEF

South Carolina Maternal Morbidity and Mortality Review Committee Co-Chairs:
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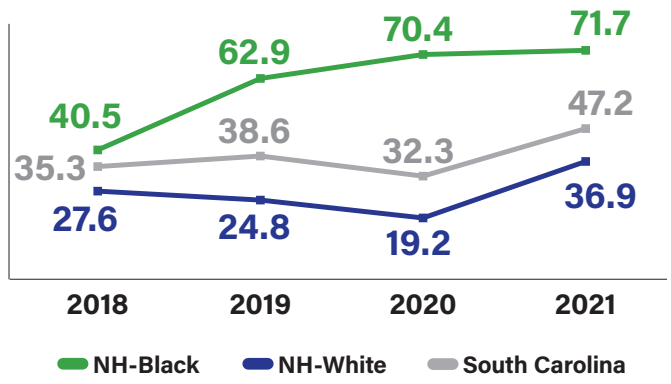
The South Carolina Maternal Morbidity and Mortality Review Committee (SCMMMRC) was established under Act 42 of 2016 (South Carolina Statute Section 44-1-310) and, in accordance with the Act, the Committee must review all maternal deaths that occur during pregnancy or within 365 days after the pregnancy ends, regardless of the cause death and compile and distribute an annual report of their findings by March 1st. Each death is examined using a standardized approach, which involves investigating the underlying causes of death, the pregnancy-relatedness, preventability, and any circumstances or 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.

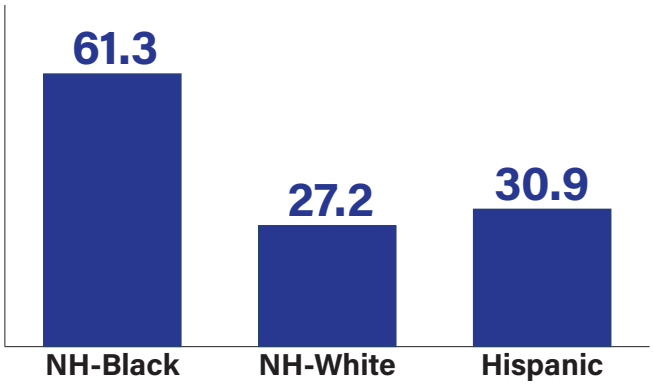
Trend in Pregnancy-Related Mortality Rate, by Race and Ethnicity

Rate per 100,000 live births



Pregnancy-Related Mortality Rate, by Race and Ethnicity

Rate per 100,000 live births, 2018-2021

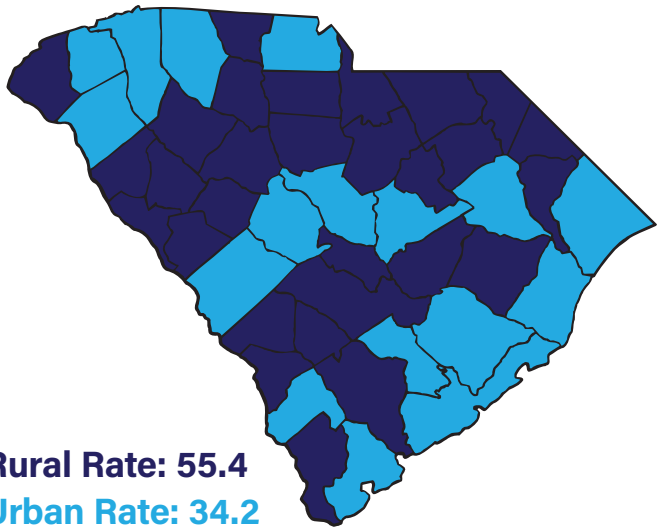


In 2024, the SCMMMRC completed the review of 88 deaths occurring in 2021; 27 of the deaths were determined to be Pregnancy-Related (PR). A PR death occurs when a woman dies from a pregnancy complication, a chain of events initiated by the pregnancy, or a condition made worse by the pregnancy.

In 2021, the SC Pregnancy-Related Mortality Rate (PRMR) was 47.2 PR deaths per 100,000 live births, a 46.2% increase from 32.3 in 2020. Black women were nearly twice as likely to die than White women. During the years 2018 to 2021, the overall PR death rate differed by race and ethnicity **(61.3 for non-Hispanic Black, 27.2 non-Hispanic White, and 30.9 for Hispanic mothers)**.

Pregnancy-Related Mortality Rate, by Urban and Rural Designation

Rate per 100,000 live births, 2018-2021



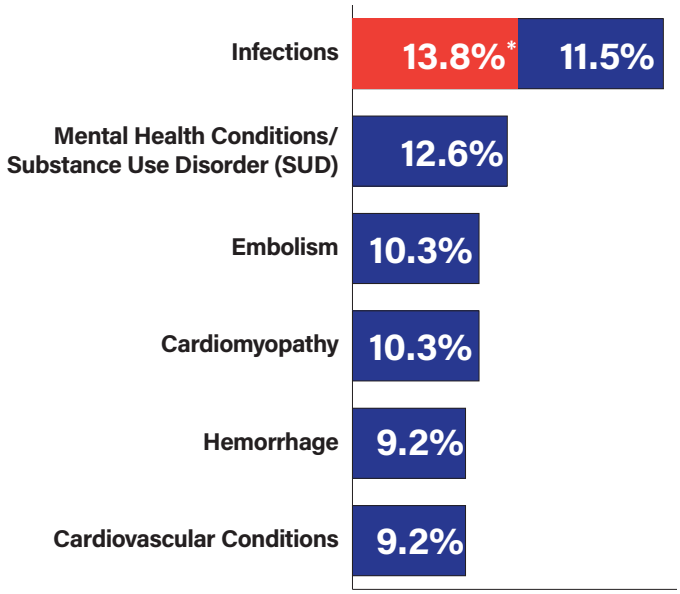
Rural Rate: 55.4

Urban Rate: 34.2

The PRMR for rural counties was 62% higher than the PRMR for urban counties[1] (55.4 and 34.2, respectively).

Leading Causes of Pregnancy-Related Deaths

Percent of pregnancy-related deaths, 2018-2021



*COVID-19 Infections

Pregnancy-Related Deaths

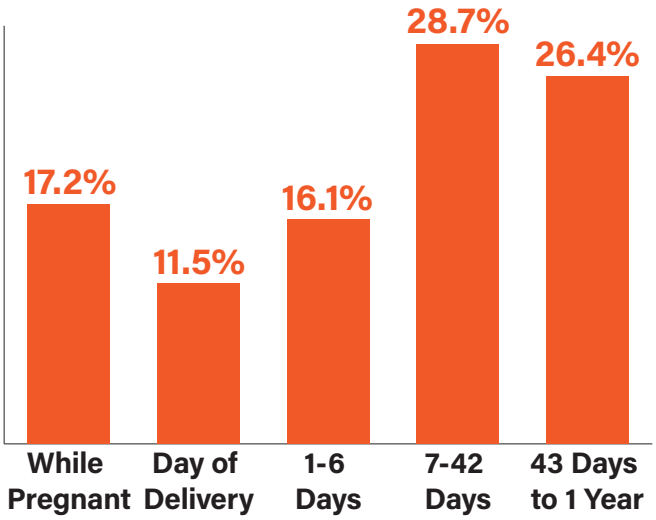
- **The cause of PR death refers to the specific underlying medical condition or event that directly led to the individual's death. This is typically determined through clinical records, autopsy reports, and death certificates.**
- **Over half of all PR infection deaths were attributed to COVID-19. COVID-19 accounted for 13.8% of all PR deaths during 2018-2021.**
- **In 2021, there were fewer PR deaths due to mental health conditions/substance use disorder (SUD), embolism and hemorrhage than in 2020. PR deaths due to mental health conditions/ SUD decreased by 53.4% from 2020 to 2021.**

The top three leading causes of death varied by race, from 2018-2021:

Non-Hispanic White Women	Non-Hispanic Black Women
▪ Infections	▪ Infections
▪ Mental Health Conditions/SUD	▪ Embolism
▪ Hemorrhage	▪ Heart Conditions

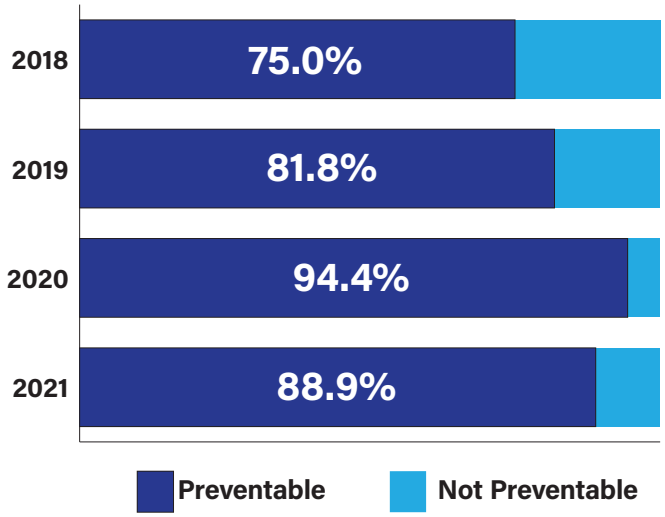
Timing of Pregnancy-Related Deaths

Percent of pregnancy-related deaths, 2018-2021



Preventability of Pregnancy-Related Deaths

Percent of pregnancy-related deaths, 2018-2021

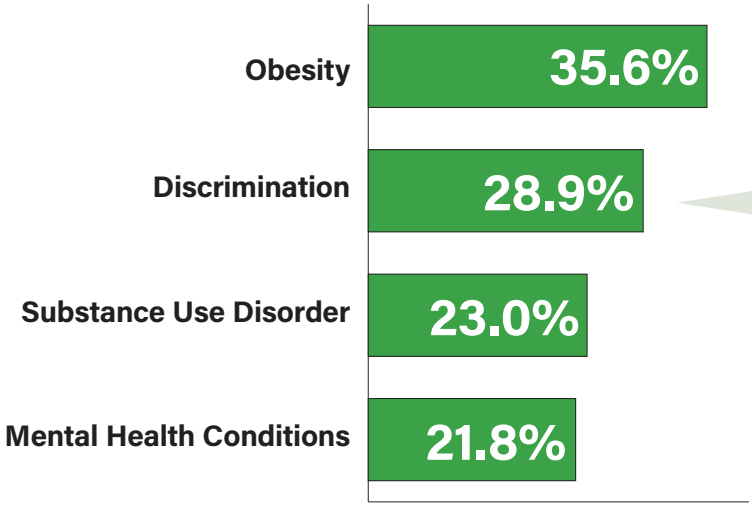


Among pregnancy-related deaths, 55.1% occurred 7 to 365 days post-partum. SC has seen an increase in pregnancy-related deaths in the late post-partum period (7-365 days), from 1 in 5 deaths in 2018 to about 2 in 3 deaths in 2021. The top three leading causes of death during the late post-partum period were infections, mental health conditions/SUD, and cardiomyopathy.

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. These changes may occur at the patient/family, provider, facility, system, or community levels and may be associated with various contributing factors.[2] **The causes of death determined most likely to be preventable were mental health conditions/SUD (100%), embolism (89%), and infection (86%).**

Circumstances of Pregnancy-Related Deaths

Percent of pregnancy-related deaths, 2018-2021



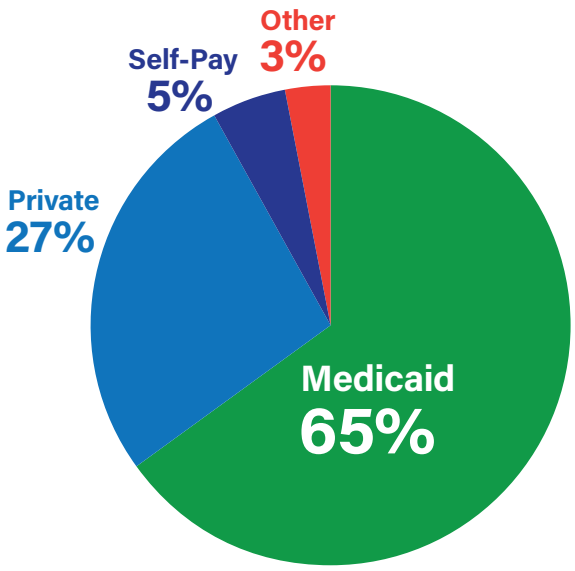
Discrimination

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.[3]

Circumstance of PR death refers to the broader social, behavioral, or systemic factors that contributed to the death. These circumstances help provide additional context of contributing factors related to the death. Obesity was recognized as a contributing factor in a little over one third of PR deaths from 2018 to 2021. Discrimination was recognized as a contributing factor in a little over one quarter of the PR deaths.

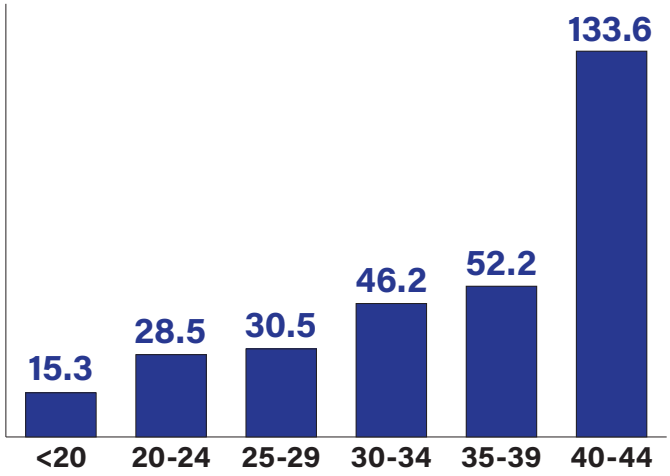
Pregnancy-Related Deaths, by Payor Source

Percent of pregnancy-related deaths, 2018-2021



Pregnancy-Related Mortality Rate, by Age

Rate per 100,000 live births, 2018-2021



All data presented through 2021 reflect Medicaid coverage that ended at 60 days post-partum. With the 2022 extension of Medicaid benefits through 365 days post-partum, an increase in utilization of services is anticipated during this time, which may impact the PR deaths among this population.

Key Takeaways

- Pregnancy-related deaths increased among NH-White and NH-Black mothers with NH-Black mothers twice as likely to die.
- Infection (and in particular, COVID-19 infection) was the leading cause of PR deaths from 2018-2021, followed by mental health conditions/SUD, and embolism.
- The PRMR was 62% higher in rural counties than in urban counties in 2018-2021.

Citations:

1. https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html
2. Pregnancy Related Death: Data from Maternal Mortality Revie Committees in 36 States, 2017-2019. Retrieved from https://www.cdc.gov/maternal-mortality/php/data-research/mmrc-2017-2019.html
3. Institute of Medicine (US) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Smedley BD, Stith AY, Nelson AR, editors. Washington (DC): National Academies Press (US); 2003. PMID: 25032386.

Recommendations from the SCMMMRC are strategies to improve maternal outcomes.

System Level: All women should have access to maternity care regardless of where they live and their ability to pay for care. All pregnant and post-partum women should receive healthcare that is respectful, non-judgmental, and non-biased and considers their cultural differences. SC should adopt an access to treatment model versus a punitive model for pregnant women who have a substance use disorder. SC should promote fair treatment of women with substance use disorder; it should be de-stigmatized and given the same consideration as a medical diagnosis. Case management and nurse navigators should be utilized for care coordination to assist pregnant women with complex medical conditions, including mental health conditions and substance use disorder.

Facility Level: Facilities should implement maternal safety bundles and use these tools to adopt standards of care. Drug and alcohol screenings should be required at facilities for women who received no prenatal care or have a history of substance use disorder. Additionally, facilities should require Emergency Room physicians and personnel to participate in training on the appropriate care of pregnant and post-partum women.

Provider Level: Providers should advise pregnant and post-partum women on the benefits and risks of the COVID-19 and all recommended vaccines. For pregnant women with moderate to severe COVID-19 infection, providers should consider the administration of monoclonal antibodies. Providers should screen and refer pregnant & post-partum women who screen positive for substance use or mental health conditions to the appropriate services for treatment.

Community Level: South Carolina communities should provide community outreach to include education about Urgent Maternal Warning Signs. South Carolina should have community-wide education, resources and information about substance use disorder available to pregnant and post-partum women and their families.

Patient and Family Level: Pregnant women should follow the American College of Obstetricians and Gynecologists and Society for Fetal Medicine recommendation that the COVID-19 vaccine is safe in any trimester.

Summary:

The SCMMMRC has identified several disproportionately affected populations that experienced a pregnancy-related death during 2018-2021, including non-Hispanic Black women, rural county residents, and women of advanced maternal age. Further, infections were the leading cause of PR deaths, and over half of these were attributed to COVID-19. The SCMMMRC is committed to improving maternal health outcomes and eliminating preventable deaths. The 2022 extension of SC Medicaid coverage provides continued benefits for post-partum women beyond the standard 6-week Ob/Gyn visit. This is an opportunity to establish a primary care provider and address key health care needs such as obesity, hypertension, mental health conditions and substance use disorder.

Committee Wins:

The Centers for Disease Control and Prevention (CDC) awarded funds for a five-year period to support the SCMMMRC. The funds will be utilized to increase timeliness and standardization of surveillance activities, data reporting, and to facilitate community engagement. The SCMMMRC is committed to eliminating pregnancy-related deaths.

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