

# South Carolina Maternal Morbidity and Mortality Review Committee

Legislative Brief  
March 2020



The South Carolina Maternal Morbidity and Mortality Review (MMMR) Committee, established by state law in 2016, investigates the death of mothers associated with pregnancy to determine which ones can be prevented. A pregnancy-related death occurs when a woman dies while pregnant or within 1 year of pregnancy. The cause is related to or made worse by her pregnancy or its management. This does not include accidental or incidental causes.<sup>1</sup>

**VISION:** To eliminate preventable maternal deaths, reduce maternal morbidities, and improve population health for women of reproductive age in South Carolina.

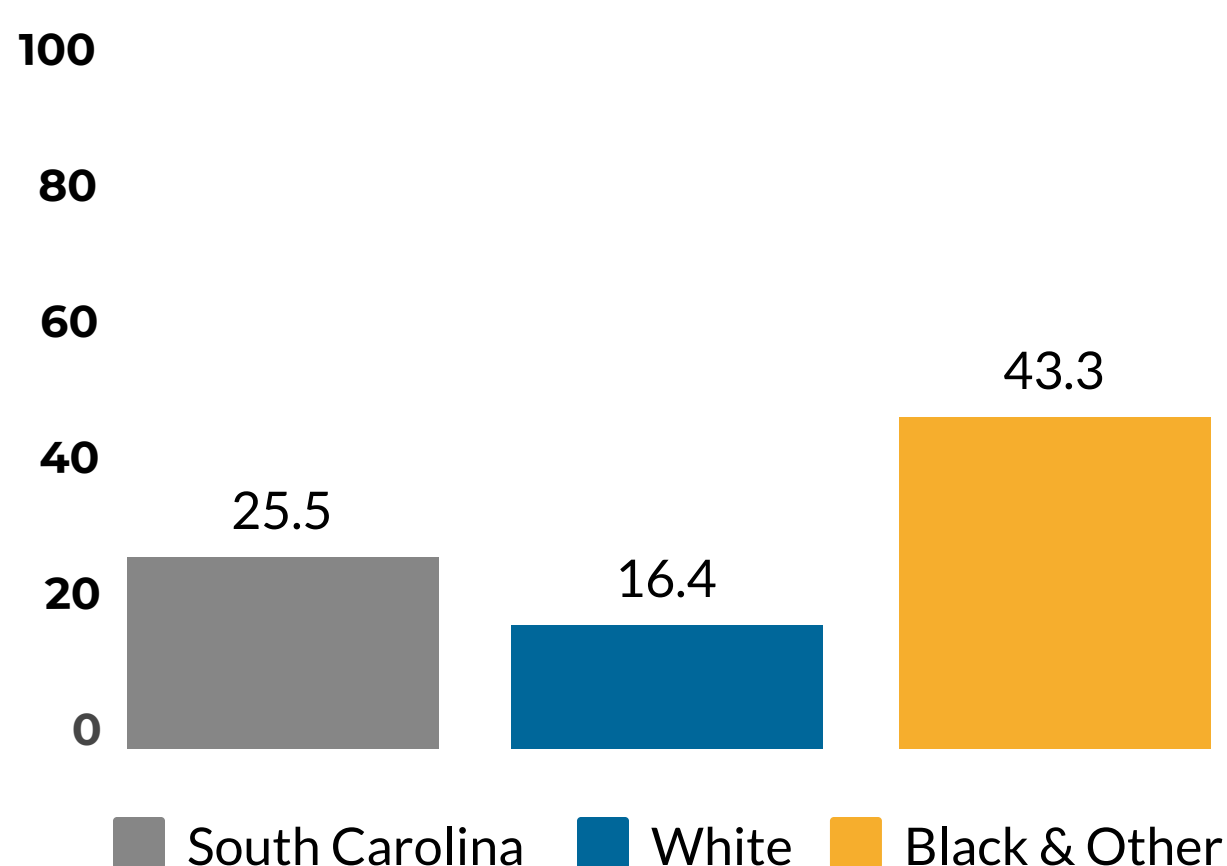
Across the United States, roughly 700 women die each year from the result of pregnancy or delivery complications.<sup>2</sup> Some groups of women experience this tragic event at a much higher rate than other groups.<sup>3</sup>

Between 2014 and 2018, 73 South Carolina women died within six weeks of giving birth, a rate of 25.5 deaths per 100,000 live births. The maternal mortality rate was 2.6 times higher for Black and Other women versus White women (43.3. vs. 16.4 maternal deaths per 100,000 live births, respectively).<sup>3</sup>

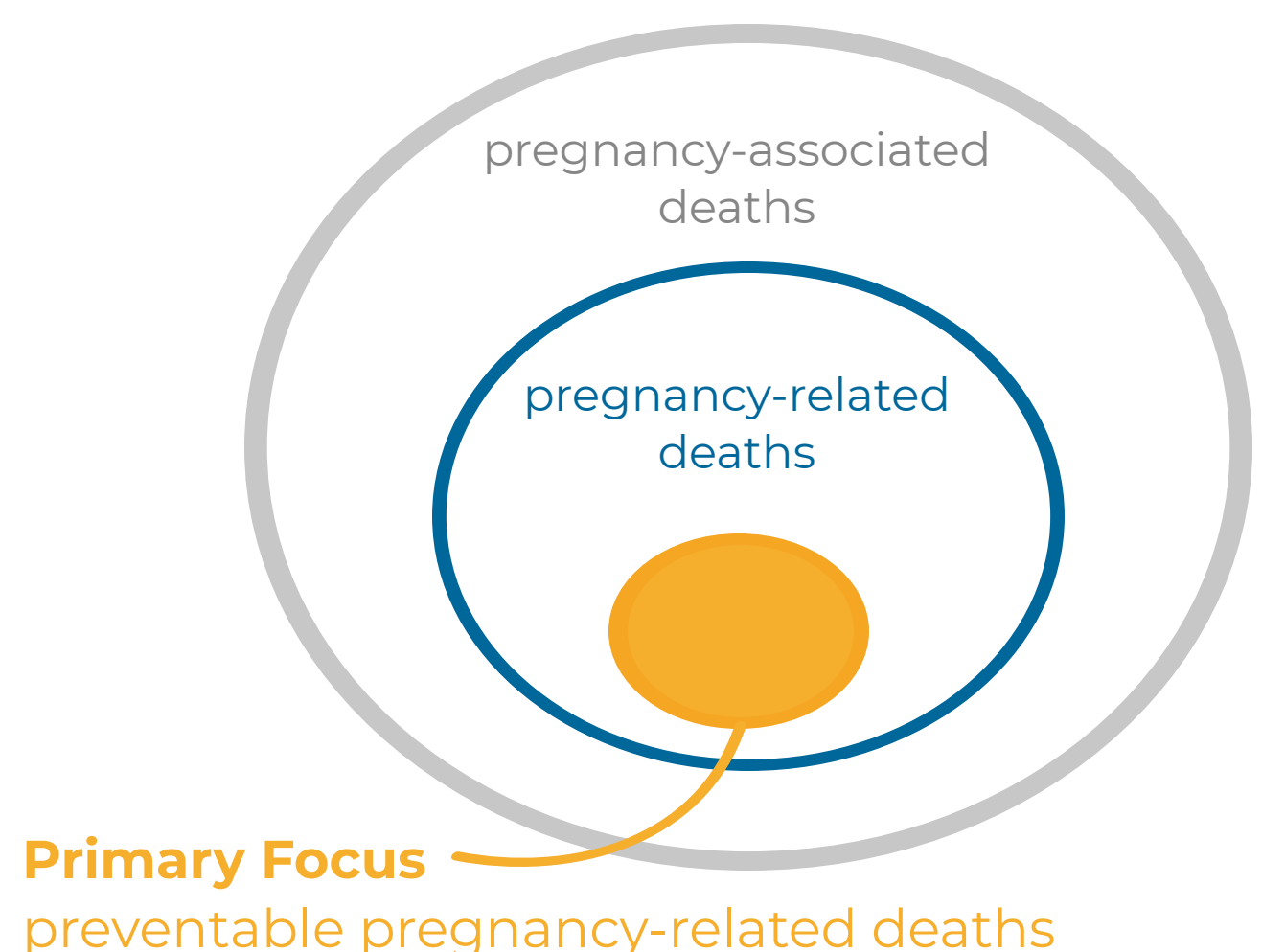
## GOALS:

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

**South Carolina Maternal Mortality Rate  
by Race, 2014-2018**  
Rate per 100,000 live births



**Scope of Case Review for the South Carolina  
Maternal Morbidity and Mortality  
Review Committee**





## SC MMR Committee Findings

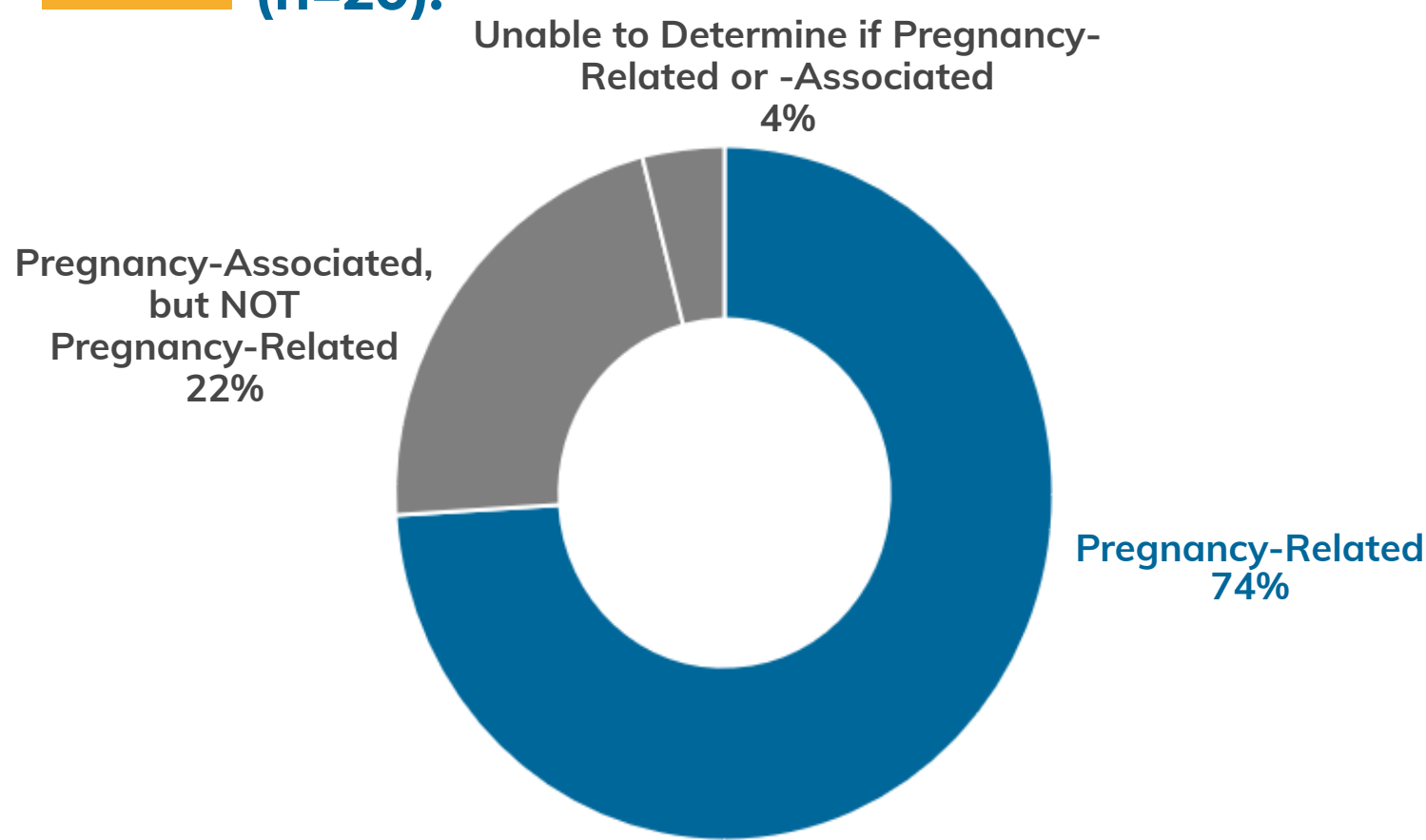
There are key decisions that the SC MMR Committee makes for each maternal death reviewed. These decisions increase understanding of the medical and non-medical contributors to maternal deaths and prioritize interventions that effectively reduce their occurrence.

Between 2016 and 2019, there were 27 maternal deaths reviewed. The Committee findings are summarized below.

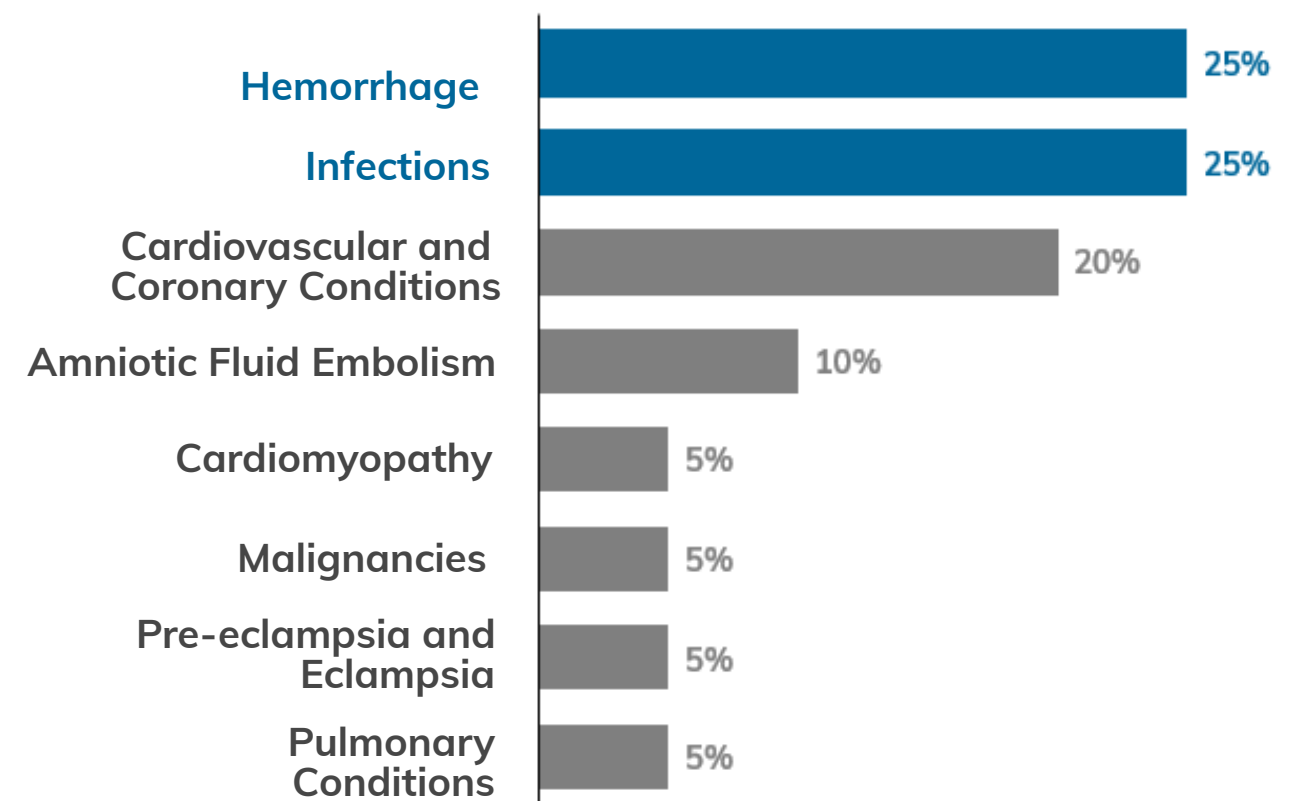
## WINS:

- Hired full-time nurse abstractor.
- Strengthened legislation to enable linkage to vital records for improved case identification.
- Implemented central hosting of the Maternal Mortality Review Information Application (MMRIA) for standardized data collection and reporting.

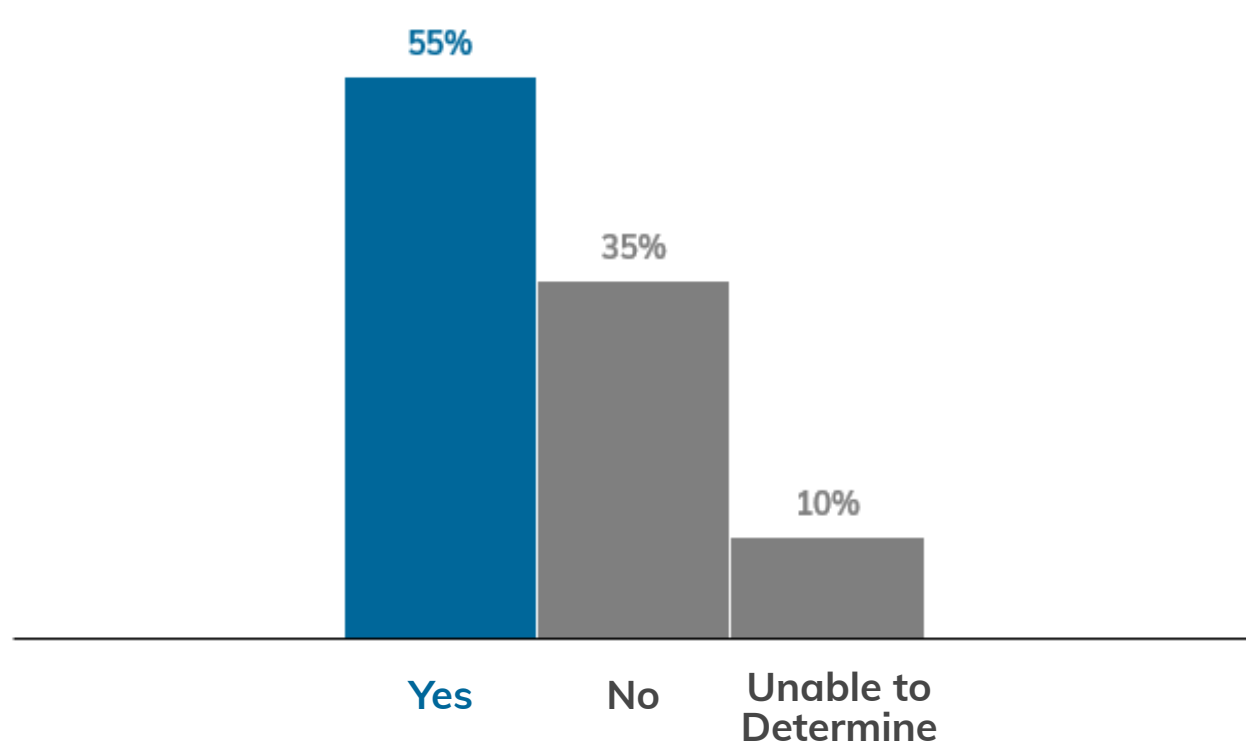
### 1 74% of cases reviewed by the Committee were determined to be pregnancy-related (n=20).



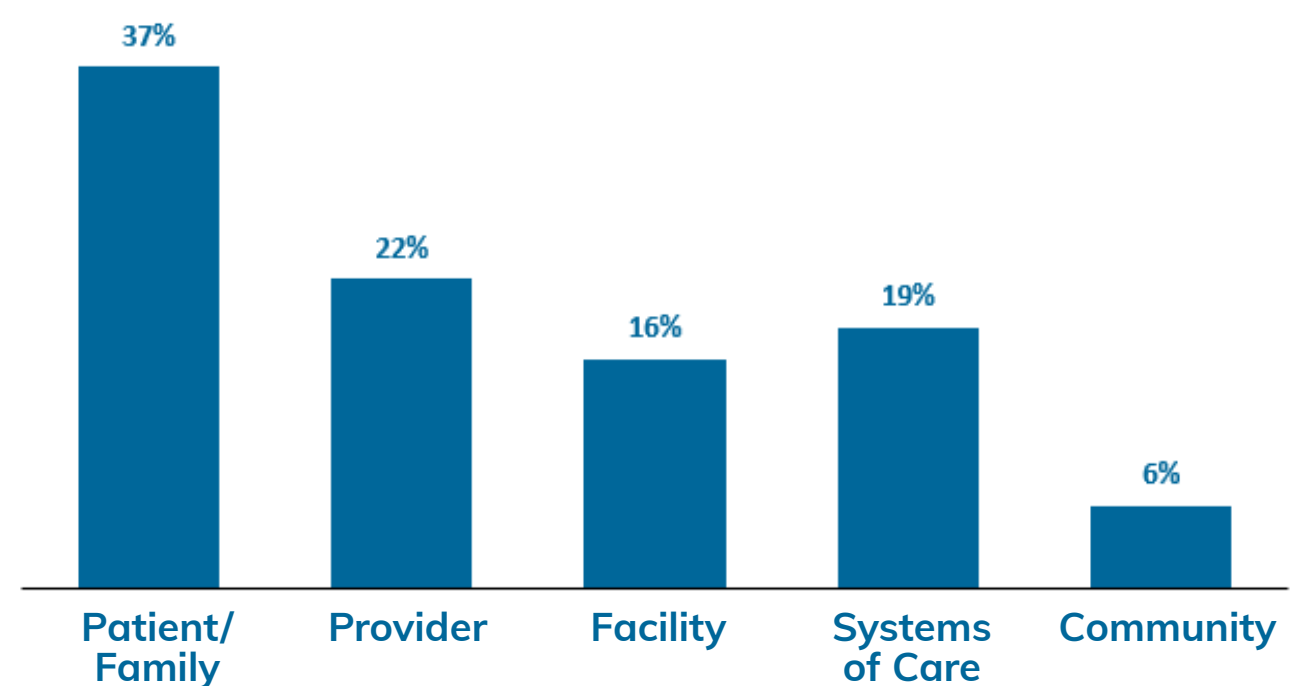
### 2 Hemorrhage and infections were the leading causes of pregnancy-related deaths.



### 3 55% of pregnancy-related deaths were determined to be preventable (i.e., there was at least some chance to alter the outcome).



### 4 Factors related to the patient/family and providers of care were the largest contributors of pregnancy-related deaths.



## CONCLUSIONS:

The SC MMR Committee found that the majority of maternal deaths reviewed were pregnancy-related and were related to complications of pregnancy and its management. Hemorrhage and infections were identified to be the leading causes of those deaths. The largest proportion of factors identified by the SC MMR Committee as contributing to pregnancy-related deaths were patient/family factors followed by provider and systems of care factors. On average, five contributing factors were identified for every pregnancy-related death.

The SC MMR Committee has had several successes since 2018, including the hiring of a full-time nurse abstractor, obtaining access to vital records for case identification, and joining the Centers for Disease Control and Prevention's centrally-hosted data entry system (MMRIA). These changes will help to strengthen the existing efforts of the SC MMRC, identify emerging issues, and highlight potential opportunities for action.

## CITATIONS:

- 1 Berg, C., Danel, I., Atrash, H., Zane, S., & Bartlett, L. (2001). Strategies to reduce pregnancy-related deaths. from identification and review to action, 2001.
- 2 Petersen, E. E., Davis, N. L., Goodman, D., Cox, S., Mayes, N., Johnston, E., ... & Barfield, W. (2019). Vital signs: pregnancy-related deaths, United States, 2011–2015, and strategies for prevention, 13 states, 2013–2017. *Morbidity and Mortality Weekly Report*, 68(18), 423.
- 3 South Carolina Vital and Morbidity Statistics 2018. (2019, September). Retrieved from <https://scdhec.gov/health/sc-public-health-statistics-maps/biostatistics-publications>.