South Carolina Maternal Health Innovation Collaborative

Maternal Health Task Force Quarterly Meeting

Tuesday, March 4, 2025
10 am to 2 pm
Microsoft Teams

SCMHIC LEADERSHIP TEAM

South Carolina Department of Public Health (SCDPH)

KRISTEN SHEALY, MSPH
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Senior Epidemiologist

Core Implementation and Evaluation Partner: University of South Carolina Institute for Families in Society

ANA LÓPEZ – DE FEDE, PhD
Co-Principal Investigator
Distinguished Research Professor Emerita

SARAH GAREAU, DrPH, MEd, MCHES
Co-Principal Investigator
Assistant Professor

Agenda

Presentations

SC Maternal Mortality Review Committee Overview & Update

Current Statewide Maternal Health Initiatives: Opportunities for Alignment

Panel Discussion

Community Birth Workers in Clinical Settings

MHI Supported Projects

Lunch Break

Breakout Sessions

Workgroup Meetings

Report Out

Next Steps/Adjourn

Housekeeping

- The Chatham House Rule

  "When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed."

- Share the information, but not who said it
- Keep names and affiliations private
- Encourages open and honest discussion

Icebreaker

What’s the first thing you’re excited to do in warmer weather?

SC Maternal Mortality & Morbidity Review Committee

2025 Legislative Brief Overview

Maternal Morbidity and Mortality Review Committee Update

Nicholas Resciniti, PhD
Kimberly Jenkins, BSN, RN

What is the South Carolina Maternal Morbidity and Mortality Review Committee (SCMMMRC)

- Legislatively mandated (2016 44-1-310).
- Statewide and multidisciplinary membership.
- Scope: deaths that occur during pregnancy or within 365 days.
- Goals: Identify the number of pregnancy-related deaths, identify trends and make actionable recommendations for prevention.
- Vision: Eliminate preventable pregnancy-related deaths, reduce maternal morbidities and improve population health for women of reproductive age in South Carolina.
- Reviewing Cohort 2022.
- Annual legislative brief published every March.
- Fall 2024 DPH was awarded a 5-year cooperative agreement by the CDC.

Pregnancy-associated death:

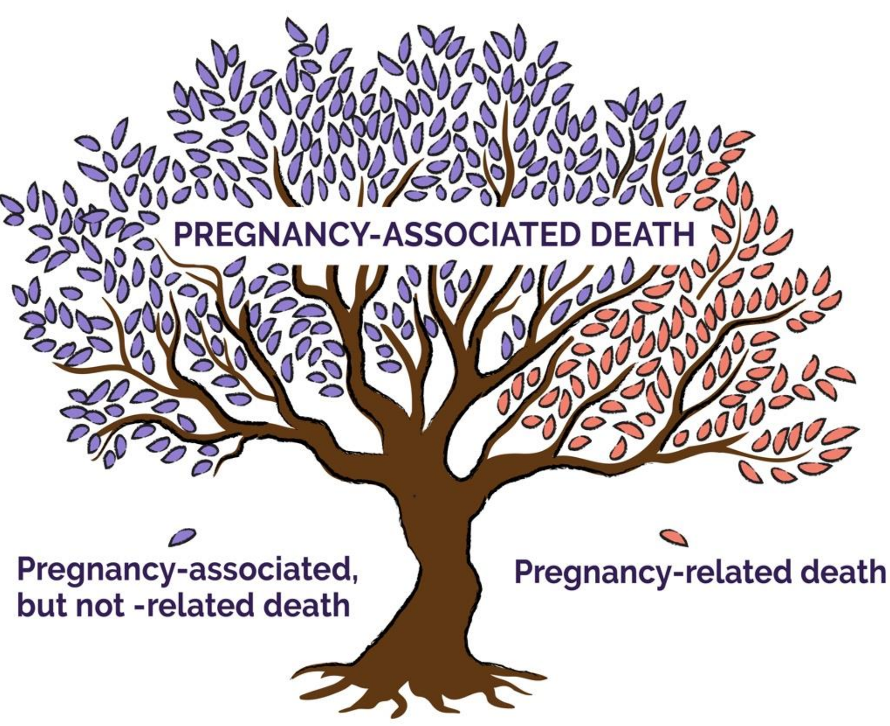
- A death during or within one year of pregnancy irrespective of cause.

Pregnancy-related death:

- A death while pregnant or within one year of the end pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of ar unrelated condition by the physiologic effects of pregnancy.

Pregnancy-associated, but not-related death:

- A death during or within one year of the end of pregnancy from a cause that is not related to pregnancy.



To determine whether a pregnancy-associated death is related to pregnancy it can be helpful to ask the following question:

If she had not been pregnant, would she have died?

Pregnancy-related deaths vs total deaths reviewed by the SCMMMRC

100
90
80
70
60
50
40
30
20
10
0

49
20
66
22
79
18
88
27

2018 2019 2020 2021

Total PR

SCMMMRC Addresses Six Key Questions for Each Pregnancy- Related Death

1. Was the death pregnancy-related?
2. What was the cause of death?
3. Was the death preventable?
4. What are the critical contributing factors?
5. What are the recommendations and actions that address those contributing factors?
6. What is the anticipated impact of those actions if implemented?

Review: Pregnancy-Related Determination

MMRIA

REVIEW DATE
Month/Day/Year

RECORD ID #

PREGNANCY-RELATEDNESS: SELECT ONE

☐ PREGNANCY-RELATED
A death during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy

☐ PREGNANCY-ASSOCIATED, BUT NOT-RELATED
A death during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy

☐ PREGNANCY-ASSOCIATED BUT UNABLE TO DETERMINE PREGNANCY-RELATEDNESS

ESTIMATE THE DEGREE OF RELEVANT INFORMATION (RECORDS) AVAILABLE FOR THIS CASE:
These fields are for internal jurisdiction use in order to evaluate opportunities to gain better access to information for reviews.

☐ COMPLETE
All records necessary for adequate review of the case were available

☐ SOMEWHAT COMPLETE
Major gaps (i.e., information that would have been crucial to the review of the case)

☐ MOSTLY COMPLETE
Minor gaps (i.e., information that would have been beneficial but was not essential to the review of the case)

☐ NOT COMPLETE
Minimal records available for review (i.e., death certificate and no additional records)

DOES THE COMMITTEE AGREE WITH THE UNDERLYING[1] CAUSE OF DEATH LISTED ON DEATH CERTIFICATE?
The underlying cause of death determination as documented by a multidisciplinary MMRC may be different from the underlying cause of death used by pathologists in the course of death certification documented in the Vital Statistics system.

☐ YES ☐ NO

PREGNANCY-RELATEDNESS: SELECT ONE

☐ PREGNANCY-RELATED
A death during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy

☐ PREGNANCY-ASSOCIATED, BUT NOT-RELATED
A death during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy

☐ PREGNANCY-ASSOCIATED BUT UNABLE TO DETERMINE PREGNANCY-RELATEDNESS

Pregnancy-related death:
A death during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy

If she had not been pregnant, would she have died?

APPENDIX C. CONSENSUS PREGNANCY-RELATED CRITERIA FOR SUICIDE AND UNINTENTIONAL OVERDOSES[9, 10]

Present Y/N	Consensus pregnancy-related criteria for suicide and unintentional overdoses	Examples
	Pregnancy Complication	
	Increased pain directly attributable to pregnancy or postpartum events leading to self-harm or drug use that are implicated in suicide or unintentional drug-related death. *[consensus during pregnancy]*	Back pain, pelvic pain, kidney stones, cesarean incision, or perineal tear pain
	Traumatic event in pregnancy or postpartum (diagnosis of fetal anomaly, stillbirth, preterm delivery, neonatal or infant death, traumatic delivery experience, removal of children from custody) with a temporal relationship between the event leading to self-harm or increased drug use and subsequent death. *[consensus in all time periods]*	Stillbirth, preterm delivery, diagnosis of fetal anomaly, traumatic delivery experience, relationship destabilization due to pregnancy, removal of child(ren) from custody
	Pregnancy-related complication likely exacerbated by drug use leading to subsequent death. *[consensus in pregnancy – only time period considered]*	Placental abruption or preeclampsia in setting of drug use
	Chain of Events Initiated by Pregnancy	
	Cessation or attempted taper of medications for pregnancy-related concerns (neonatal/fetal exposure risk, fear of child protective service involvement) leading to maternal destabilization or drug use and subsequent death. Neonatal or fetal risk - *[consensus in all time periods]*. Child Protective Service involvement - *[consensus during pregnancy]*	Substance use pharmacotherapy (methadone or buprenorphine), psychiatric medications, pain medications
	Inability to access inpatient or outpatient addiction or mental health treatment due to pregnancy. *[consensus during and within 6 months of pregnancy]*	Health care professionals uncomfortable with treating pregnant women, facilities not available that accept pregnant women
	Perinatal psychiatric conditions resulting in maternal destabilization or drug use and subsequent death. *[consensus during and within 6 months of pregnancy]*	Depression diagnosed in pregnancy or postpartum resulting in suicide
	Recovery/stabilization of substance use disorder achieved during pregnancy or postpartum with clear statement in records that pregnancy was motivating factor with subsequent relapse and subsequent death. *[no consensus at any time period]*	Relapse leading to overdose due to decreased tolerance or polysubstance use
	Aggravation of Underlying Condition by Pregnancy	
	Worsening of underlying depression, anxiety or other psychiatric condition in pregnancy or postpartum period with documentation that mental illness led to drug use or self-harm and subsequent death. *[consensus during and within 6 months of pregnancy]*	Pre-existing depression exacerbated in the postpartum period leading to suicide
	Exacerbation, under-treatment or delayed treatment of pre-existing condition in pregnancy or postpartum leading to use of prescribed or illicit drugs resulting in death, or suicide. *[consensus during and within 6 months of pregnancy]*	Undertreatment of chronic pain leading to misuse of medications or use of illicit drugs, resulting in death
	Medical conditions secondary to drug use in setting of pregnancy or postpartum that may be attributable to pregnancy-related physiology and increased risk of complications leading to death. *[no consensus at any time period]*	Stroke or cardiovascular arrest due to stimulant use

[9] Smid MC et al, 2023. *Consensus pregnancy-related criteria for suicide and unintentional overdoses using a Delphi process*. Arch Womens Ment Health.

[10] The italicized text in brackets specify where the Delphi exercise with representatives from 48 MMRCs and eight experts in maternal mortality, substance use disorder, and maternal mental health reached consensus on the criterion. Lack of Delphi consensus as shown in brackets should not override committee consensus on a specific case. If "Yes" is chosen by the committee for at least one of the boxes under any of the three categories then that would constitute a pregnancy-related death.

Review: Cause of Death (PMSS-MM codes)

MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM v24 — 1

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING[1] CAUSE OF DEATH
Refer to Appendix A for PMSS-MM cause of death list.

If a death is pregnancy-associated, not related then an underlying cause of death entry is not necessary. Use optional box below.

TYPE	OPTIONAL: CAUSE (DESCRIPTIVE)
UNDERLYING[1,2]	
CONTRIBUTING[2,3]	
IMMEDIATE[3]	
OTHER SIGNIFICANT[3]	

COMMITTEE DETERMINATIONS ON CIRCUMSTANCES SURROUNDING DEATH[4]

DID **OBESITY** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **DISCRIMINATION**[5] CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **MENTAL HEALTH CONDITIONS** OTHER THAN SUBSTANCE USE DISORDER CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

MANNER OF DEATH

WAS THIS DEATH A SUICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
WAS THIS DEATH A HOMICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

IF ACCIDENTAL DEATH, HOMICIDE, OR SUICIDE, LIST THE **MEANS OF FATAL INJURY**	☐ FIREARM ☐ SHARP INSTRUMENT ☐ BLUNT INSTRUMENT ☐ POISONING/OVERDOSE ☐ HANGING/ STRANGULATION/ SUFFOCATION	☐ FALL ☐ PUNCHING/ KICKING/BEATING ☐ EXPLOSIVE ☐ DROWNING ☐ FIRE OR BURNS ☐ MOTOR VEHICLE	☐ INTENTIONAL NEGLECT ☐ OTHER, SPECIFY: ☐ UNKNOWN ☐ NOT APPLICABLE
IF HOMICIDE, WHAT WAS THE **RELATIONSHIP OF THE PERPETRATOR TO THE DECEDENT?**	☐ NO RELATIONSHIP ☐ PARTNER ☐ EX-PARTNER ☐ OTHER RELATIVE	☐ OTHER ☐ ACQUAINTANCE ☐ OTHER, SPECIFY:	☐ UNKNOWN ☐ NOT APPLICABLE

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING[1] CAUSE OF DEATH
Refer to Appendix A for PMSS-MM cause of death list.

If a death is pregnancy-associated, not related then an underlying cause of death entry is not necessary. Use optional box below.

Underlying cause *refers to the disease or injury that* ***initiated*** *the chain of events leading to death or the circumstances of the accident or violence which produced the fatal injury.*

PMSS-MM Codes for Reference

APPENDIX A. PMSS-MM CODES: IF PREGNANCY-RELATED,[7] COMMITTEE DETERMINATION OF UNDERLYING[1] CAUSE OF DEATH

Hemorrhage (Excludes Aneurysms or CVA)
10.1 - Hemorrhage – Uterine Rupture
10.2 - Placental Abruption
10.3 - Placenta Previa
10.4 - Ruptured Ectopic Pregnancy
10.5 - Hemorrhage – Uterine Atony/Postpartum Hemorrhage
10.6 - Placenta Accreta/Increta/Percreta
10.7 - Hemorrhage due to Retained Placenta
10.10 - Hemorrhage – Laceration/Intra-Abdominal Bleeding
10.9 - Other Hemorrhage/NOS

Infection
20.1 - Postpartum Genital Tract (e.g., of the Uterus/ Pelvis/Perineum/Necrotizing Fasciitis)
20.2 - Sepsis/Septic Shock
20.4 - Chorioamnionitis/Antepartum Infection
20.6 - Urinary Tract Infection
20.7 - Influenza
20.8 - COVID-19
20.10 - Pneumonia
20.11 - Other Non-Pelvic Infection (e.g., TB, Meningitis, HIV)
20.9 - Other Infection/NOS

Embolism (Excludes Cerebrovascular)
30.1 - Embolism – Thrombotic
30.9 - Other Embolism (Excludes Amniotic Fluid Embolism)/NOS

Amniotic Fluid Embolism
31.1 - Amniotic Fluid Embolism

Hypertensive Disorders of Pregnancy (HDP)
40.1 - Preeclampsia
50.1 - Eclampsia
60.1 - Chronic Hypertension with Superimposed Preeclampsia

Anesthesia Complications
70.1 - Anesthesia Complications

Cardiomyopathy
80.1 - Postpartum/Peripartum Cardiomyopathy
80.2 - Hypertrophic Cardiomyopathy
80.9 - Other Cardiomyopathy/NOS

Hematologic
82.1 - Sickle Cell Anemia
82.9 - Other Hematologic Conditions including Thrombophilias/TTP/HUS/NOS

Collagen Vascular/Autoimmune Diseases
83.1 - Systemic Lupus Erythematosus (SLE)
83.9 - Other Collagen Vascular Diseases/NOS

Conditions Unique to Pregnancy
85.1 - Conditions Unique to Pregnancy (e.g., Gestational Diabetes, Hyperemesis, Liver Disease of Pregnancy)

Injury
88.1 - Intentional (Homicide)
88.2 - Unintentional
88.9 - Unknown Intent/NOS

Cancer
89.1 - Gestational Trophoblastic Disease (GTD)
89.3 - Malignant Melanoma
89.9 - Other Malignancies/NOS

Other Cardiovascular Conditions (excluding cardiomyopathy, HDP, and CVA)
90.1 - Coronary Artery Disease/Myocardial Infarction (MI)/Atherosclerotic Cardiovascular Disease
90.2 - Pulmonary Hypertension
90.3 - Valvular Heart Disease Congenital and Acquired
90.4 - Vascular Aneurysm/Dissection (Non-Cerebral)
90.5 - Hypertensive Cardiovascular Disease
90.6 - Marfan Syndrome
90.7 - Conduction Defects/Arrhythmias
90.8 - Vascular Malformations Outside Head and Coronary Arteries
90.9 - Other Cardiovascular/NOS, including CHF, Cardiomegaly, Cardiac Hypertrophy, Cardiac Fibrosis, Non-Acute Myocarditis

Pulmonary Conditions (Excludes ARDS-Adult Respiratory Distress Syndrome)
91.1 - Chronic Lung Disease
91.2 - Cystic Fibrosis
91.3 - Asthma
91.9 - Other Pulmonary Disease/NOS

Neurologic/Neurovascular Conditions (Excluding CVA)
92.1 - Epilepsy/Seizure Disorder
92.9 - Other Neurologic Diseases/NOS

Renal Disease
93.1 - Chronic Renal Failure/End-Stage Renal Disease (ESRD)
93.9 - Other Renal Disease/NOS

Cerebrovascular Accident (CVA) not Secondary to HDP
95.1 - Cerebrovascular Accident (Hemorrhage/ Thrombosis/Aneurysm/Malformation) not Secondary to Hypertensive Disorders of Pregnancy

Metabolic/Endocrine
96.2 - Diabetes Mellitus
96.9 - Other Metabolic/Endocrine Disorders/NOS

Gastrointestinal Disorders
97.1 - Crohn's Disease/Ulcerative Colitis
97.2 - Liver Disease/Failure/Transplant
97.9 - Other Gastrointestinal Diseases/NOS

Mental Health Conditions
100.1 - Depressive Disorder
100.2 - Anxiety Disorder (including Post-Traumatic Stress Disorder)
100.3 - Bipolar Disorder
100.4 - Psychotic Disorder
100.5 - Substance Use Disorder
100.9 - Other Psychiatric Conditions/NOS

Unknown COD
999.1 - Unknown COD

Review: Committee Determinations on Circumstances Surrounding Death

MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM v24 1

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING[1] CAUSE OF DEATH
Refer to Appendix A for PMSS-MM cause of death list.

If a death is pregnancy-associated, not related then an underlying cause of death entry is not necessary. Use optional box below.

TYPE	OPTIONAL: CAUSE (DESCRIPTIVE)
UNDERLYING[1,2]	
CONTRIBUTING[2,3]	
IMMEDIATE[2]	
OTHER SIGNIFICANT[2]	

COMMITTEE DETERMINATIONS ON CIRCUMSTANCES SURROUNDING DEATH[4]

DID **OBESITY** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **DISCRIMINATION**[5] CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **MENTAL HEALTH CONDITIONS** OTHER THAN SUBSTANCE USE DISORDER CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

MANNER OF DEATH

WAS THIS DEATH A SUICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
WAS THIS DEATH A HOMICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

IF ACCIDENTAL DEATH, HOMICIDE, OR SUICIDE, LIST THE **MEANS OF FATAL INJURY**
☐ FIREARM
☐ SHARP INSTRUMENT
☐ BLUNT INSTRUMENT
☐ POISONING/OVERDOSE
☐ HANGING/ STRANGULATION/ SUFFOCATION
☐ FALL
☐ PUNCHING/ KICKING/BEATING
☐ EXPLOSIVE
☐ DROWNING
☐ FIRE OR BURNS
☐ MOTOR VEHICLE
☐ INTENTIONAL NEGLECT
☐ OTHER, SPECIFY:
☐ UNKNOWN
☐ NOT APPLICABLE

IF HOMICIDE, WHAT WAS THE **RELATIONSHIP OF THE PERPETRATOR TO THE DECEDENT?**
☐ NO RELATIONSHIP
☐ PARTNER
☐ EX-PARTNER
☐ OTHER RELATIVE
☐ OTHER
☐ ACQUAINTANCE
☐ OTHER, SPECIFY:
☐ UNKNOWN
☐ NOT APPLICABLE

The checkboxes refer to the woman's own experience, not the broader context surrounding her death.

COMMITTEE DETERMINATIONS ON CIRCUMSTANCES SURROUNDING DEATH[4]

DID **OBESITY** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **DISCRIMINATION**[5] CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **MENTAL HEALTH CONDITIONS** OTHER THAN SUBSTANCE USE DISORDER CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

MANNER OF DEATH

WAS THIS DEATH A SUICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
WAS THIS DEATH A HOMICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

IF ACCIDENTAL DEATH, HOMICIDE, OR SUICIDE, LIST THE **MEANS OF FATAL INJURY**
☐ FIREARM
☐ SHARP INSTRUMENT
☐ BLUNT INSTRUMENT
☐ POISONING/OVERDOSE
☐ HANGING/ STRANGULATION/ SUFFOCATION
☐ FALL
☐ PUNCHING/ KICKING/BEATING
☐ EXPLOSIVE
☐ DROWNING
☐ FIRE OR BURNS
☐ MOTOR VEHICLE
☐ INTENTIONAL NEGLECT
☐ OTHER, SPECIFY:
☐ UNKNOWN
☐ NOT APPLICABLE

IF HOMICIDE, WHAT WAS THE **RELATIONSHIP OF THE PERPETRATOR TO THE DECEDENT?**
☐ NO RELATIONSHIP
☐ PARTNER
☐ EX-PARTNER
☐ OTHER RELATIVE
☐ OTHER
☐ ACQUAINTANCE
☐ OTHER, SPECIFY:
☐ UNKNOWN
☐ NOT APPLICABLE

Review: Committee Determination on Discrimination

MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM v24 1

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING[1] CAUSE OF DEATH Refer to Appendix A for PMSS-MM cause of death list.	

If a death is pregnancy-associated, not related then an underlying cause of death entry is not necessary. Use optional box below.

TYPE	OPTIONAL: CAUSE (DESCRIPTIVE)
UNDERLYING[1,2]	
CONTRIBUTING[2,3]	
IMMEDIATE[2]	
OTHER SIGNIFICANT[2]	

COMMITTEE DETERMINATIONS ON CIRCUMSTANCES SURROUNDING DEATH[4]

DID **OBESITY** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **DISCRIMINATION**[5] CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **MENTAL HEALTH CONDITIONS** OTHER THAN SUBSTANCE USE DISORDER CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

MANNER OF DEATH

WAS THIS DEATH A SUICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
WAS THIS DEATH A HOMICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

IF ACCIDENTAL DEATH, HOMICIDE, OR SUICIDE, LIST THE **MEANS OF FATAL INJURY**	☐ FIREARM ☐ SHARP INSTRUMENT ☐ BLUNT INSTRUMENT ☐ POISONING/OVERDOSE ☐ HANGING/ STRANGULATION/ SUFFOCATION	☐ FALL ☐ PUNCHING/ KICKING/BEATING ☐ EXPLOSIVE ☐ DROWNING ☐ FIRE OR BURNS ☐ MOTOR VEHICLE	☐ INTENTIONAL NEGLECT ☐ OTHER, SPECIFY: ☐ UNKNOWN ☐ NOT APPLICABLE
IF HOMICIDE, WHAT WAS THE **RELATIONSHIP OF THE PERPETRATOR** TO THE DECEDENT?	☐ NO RELATIONSHIP ☐ PARTNER ☐ EX-PARTNER ☐ OTHER RELATIVE	☐ OTHER ☐ ACQUAINTANCE ☐ OTHER, SPECIFY:	☐ UNKNOWN ☐ NOT APPLICABLE

DID DISCRIMINATION[5] CONTRIBUTE TO THE DEATH? ☐ YES ☐ PROBABLY ☐ NO ☐ UNKNOWN

This checkbox refers to discrimination. Discrimination is 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. (Smedley et al, 2003 and Dr. Rachel Hardeman)*

Family Interviews often provide insight regarding discrimination determinability.

MMRIA DISCRIMINATION & RACISM FIELDS

Discrimination

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.*

Interpersonal Racism

Discriminatory interaction between individuals based on differential assumptions about the abilities, motives, and intentions of others and resulting in differential actions toward others based on their race. It can be conscious as well as unconscious, and it includes acts of commission and acts of omission. It manifests as *lack of respect, suspicion, devaluation, scapegoating, and dehumanization.*

Structural Racism

Systems of power based on historical injustices and contemporary social factors that systematically disadvantage people of color and advantage white people through inequities in housing, education, employment, earnings, benefits, credit, media, health care, criminal justice, etc.

Hardeman RR, Kheyfets A, Mantha AB, et al. Developing Tools to Report Racism in Maternal Health for the CDC Maternal Mortality Review Information Application (MMRIA): Findings from the MMRIA Racism & Discrimination Working Group. Matern Child Health J. 2022 Apr;26(4):661-669

Fig 1. A Conceptual Model of how Racism Operates and Results in Inequities in Maternal Mortality and Severe Maternal Morbidity

Historical Context

401 years of racism & white supremacy

Contemporary Forms of Racism

Forms of Racism

- Interpersonal
- Internalized
- Institutional
- Structural

Manifestations

- Microaggressions; implicit bias
- Acceptance of racialized narratives, societal beliefs and stereotypes
- Lack of anti-racist training; lack of diversity among MDs, RNs, CNMs
- Institutional policies, public policies, cultural representations, norms ideologies

Social Determinants of Health

Manifestations in healthcare

Communication failures/ Stereotyping by providers:

- Failed shared-decision making
- Concerns not addressed
- Delays in treatment
- Lack of appropriate referral or consultation
- Low expectations of patient engagement
- Victim blaming
- Ignored and improperly treated symptoms
- Ignored and improperly treated pain

Differential Treatment:

- Lack of quality care for racial minorities
- Restrictions on social support allowed in delivery rooms
- Delays in treatment
- Lack of coordinated care
- Failure to use a reproductive justice lens or framework in care delivery
- Failure to mandate anti-racism training
- Failure to offer culturally congruent care

Lack of resources/policies

- Inadequate staffing in hospitals in majority black neighborhoods
- Inadequate hospitals in majority black neighborhoods
- Inadequate transportation to prenatal appointments
- Lack of providers accepting patients insured by Medicaid
- Inadequate resources to support quality infrastructure
- Inadequate health insurance coverage and duration
- Lack of institutional policy on anti-racism

Outcome

Racial Inequities in Maternal Mortality and Severe Maternal Morbidity

Hardeman RR, Kheyfets A, Mantha AB, et al. Developing Tools to Report Racism in Maternal Health for the CDC Maternal Mortality Review Information Application (MMRIA): Findings from the MMRIA Racism & Discrimination Working Group. Matern Child Health J. 2022 Apr;26(4):661-669

Preventability

COMMITTEE DETERMINATION OF PREVENTABILITY	WAS THIS DEATH PREVENTABLE?	☐ YES	☐ NO
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 to patient, family, provider, facility, system and/or community factors.	CHANCE TO ALTER OUTCOME[6]	☐ GOOD CHANCE ☐ NO CHANCE	☐ SOME CHANCE ☐ UNABLE TO DETERMINE

MMRIA — MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM v24 — 2

COMMITTEE DETERMINATION OF PREVENTABILITY	WAS THIS DEATH PREVENTABLE?	☐ YES	☐ NO
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 to patient, family, provider, facility, system and/or community factors.	CHANCE TO ALTER OUTCOME[6]	☐ GOOD CHANCE ☐ NO CHANCE	☐ SOME CHANCE ☐ UNABLE TO DETERMINE

CONTRIBUTING FACTORS AND RECOMMENDATIONS FOR ACTION (Entries may continue to grid on page 3)

CONTRIBUTING FACTORS WORKSHEET
What were the factors that contributed to this death? Multiple contributing factors may be present at each level: Choose one contributing factor per row until all contributing factors have been identified and described.

RECOMMENDATIONS OF THE COMMITTEE
If there was at least some chance that the death could have been averted, what were the specific and feasible actions that, if implemented or altered, might have changed the course of events? Develop one recommendation per row until all contributing factors have been addressed.

DESCRIPTION OF ISSUE (enter a description for EACH contributing factor listed)	CONTRIBUTING FACTOR (enter one per row; repeat as needed if a contributor has more than one recommendation)	LEVEL	COMMITTEE RECOMMENDATION [Who?] should [do what?] [when?] Map recommendations to contributing factors; repeat as needed if a recommendation has more than one contributor.	LEVEL	PREVENTION TYPE (choose below)	EXPECTED IMPACT (choose below)

CONTRIBUTING FACTOR KEY (DESCRIPTIONS IN APPENDIX B)
- Access/financial
- Adherence
- Assessment
- Chronic disease
- Clinical skill/quality of care
- Communication
- Continuity of care/care coordination
- Cultural/religious
- Delay
- Discrimination
- Environmental
- Equipment/technology
- Interpersonal racism
- Knowledge
- Law Enforcement
- Legal
- Mental health conditions
- Outreach
- Policies/procedures
- Referral
- Social support/isolation
- Structural racism
- Substance use disorder - alcohol, illicit/prescription drugs
- Tobacco use
- Trauma
- Unstable housing
- Violence
- Other

DEFINITION OF LEVELS
- PATIENT/FAMILY: An individual before, during or after a pregnancy, and their family, internal or external to the household, with influence on the individual
- PROVIDER: An individual with training and expertise who provides care, treatment, and/or advice
- FACILITY: A physical location where direct care is provided - ranges from small clinics and urgent care centers to hospitals with trauma centers
- SYSTEM: Interacting entities that support services before, during, or after a pregnancy - ranges from healthcare systems and payors to public services and programs
- COMMUNITY: A grouping based on a shared sense of place or identity - ranges from physical neighborhoods to a community based on common interests and shared circumstances

PREVENTION TYPE
- PRIMARY: Prevents the contributing factor before it ever occurs
- SECONDARY: Reduces the impact of the contributing factor once it has occurred (i.e., treatment)
- TERTIARY: Reduces the impact or progression of what has become an ongoing contributing factor (i.e., management of complications)

EXPECTED IMPACT
- SMALL: Education/counseling (community- and/or provider-based health promotion and education activities)
- MEDIUM: Clinical intervention and coordination of care across continuum of well-woman visits (protocols, prescriptions)
- LARGE: Long-lasting protective intervention (improve readiness, recognition and response to obstetric emergencies/LARC)
- EXTRA LARGE: Change in context (promote environments that support healthy living/ensure available and accessible services)
- GIANT: Address social drivers of health (poverty, inequality, etc.)

Preventability

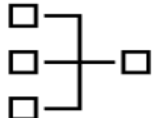
A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, provider, facility, system and/or community factors.

Sourced from: Berg CJ, Harper MA, Atkinson SM, Bell EA, Brown HL, Hage ML, et al. Preventability of pregnancy-related deaths: results of a state-wide review. Obstet Gynecol 2005;106:1228–34.

Patient and Family

Provider

Facility



Systems

Community

Contributing Factors

1. Access/financial
2. Adherence
3. Assessment
4. Chronic disease
5. Clinical skill/quality of care
6. Communication
7. Continuity of care/care coordination
8. Cultural/religious
9. Delay
10. Discrimination
11. Environmental
12. Equipment/technology
13. Interpersonal racism
14. Knowledge
15. Law Enforcement
16. Legal
17. Mental health conditions
18. Outreach
19. Policies/procedures
20. Referral
21. Social support/isolation
22. Structural racism
23. Substance use disorder
24. Tobacco use
25. Trauma
26. Unstable housing
27. Violence
28. Other

SOUTH CAROLINA DPH DEPARTMENT OF PUBLIC HEALTH

Specific and Actionable Recommendations

______ should _________ ________.

(who?) (do what?) (when?)

WHO is the entity/agency who would have been/be responsible for the intervention?*

WHAT is the intervention and **WHERE** is the intervention point?*

- Patient/Family
- Provider
- Facility
- System
- Community

WHEN is the proposed intervention point?

- Among women of reproductive age ("preconception")
- In pregnancy and in the postpartum period
  - Labor & Delivery (L&D)
  - Prior to L&D hospitalization discharge
  - First 6 weeks postpartum
  - 42-365 days postpartum

*Enter recommendation at the relevant level (Patient/Family, Provider, Facility, System, Community).

Sourced from: MMRIA Facilitation Guide

Data that Fuels Action

Cascading Effects of Review Committee Actions

Pregnancy -related deaths

Near miss events and severe maternal morbidities

Maternal health complications requiring rehospitalization

Maternal health complications requiring emergency department and acute outpatient care

Maternal health complications that can be managed in collaboration with a primary care provider

Pregnancies and postpartum uncomplicated by preexisting and pregnancy-induced health conditions

Elimination of preventable deaths and near miss events

Reduction of emergency and acute care events

Improved population level maternal health

SCMMMRC Data

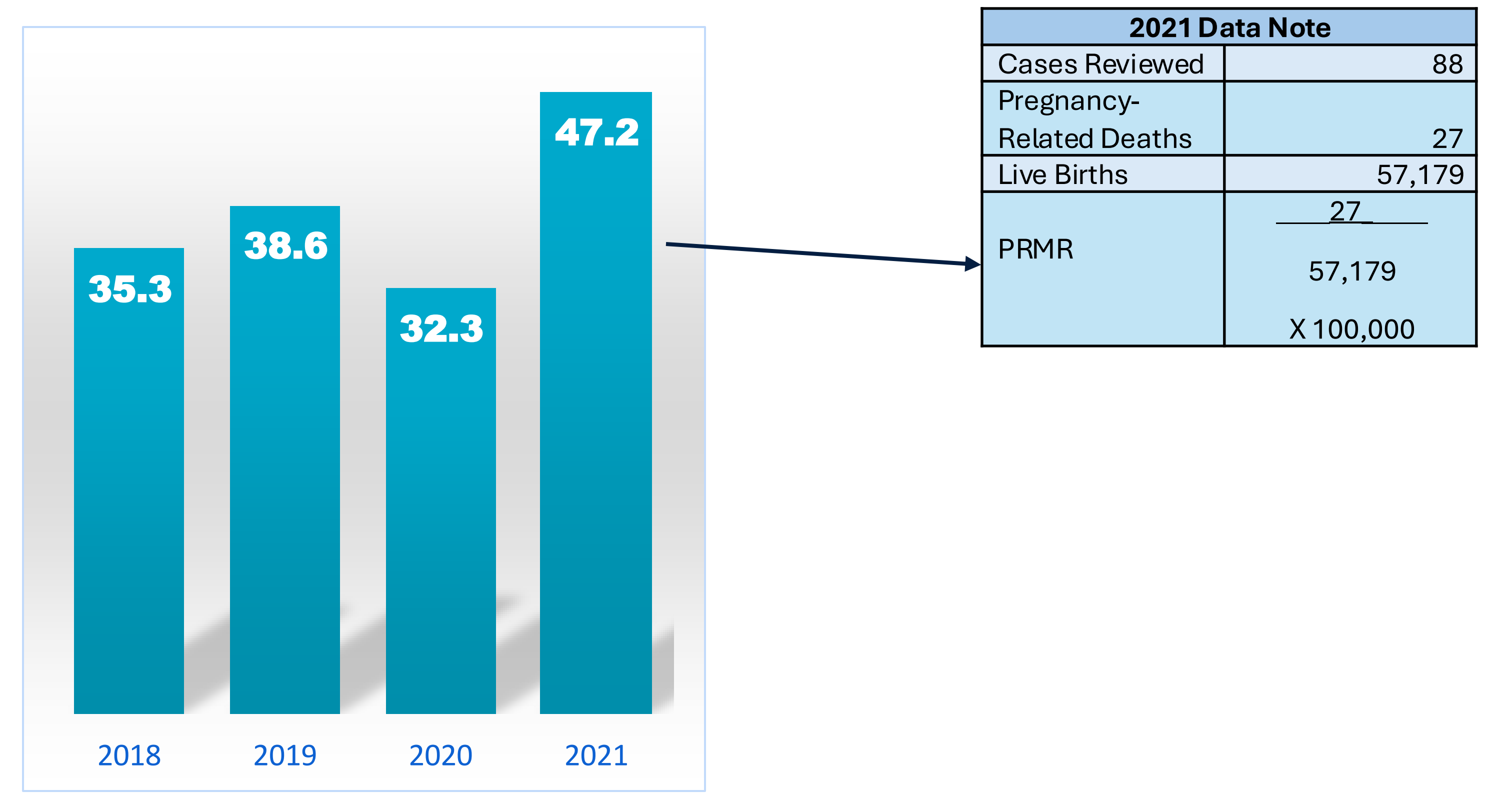
Pregnancy-Related Mortality Rate, South Carolina and United States

Rate per 100,000 live births

Year	SC	US
2018	35.3	17.4
2019	38.6	20.1
2020	32.3	23.8
2021	47.2	32.9

Pregnancy-Related Morality Rate, by Year

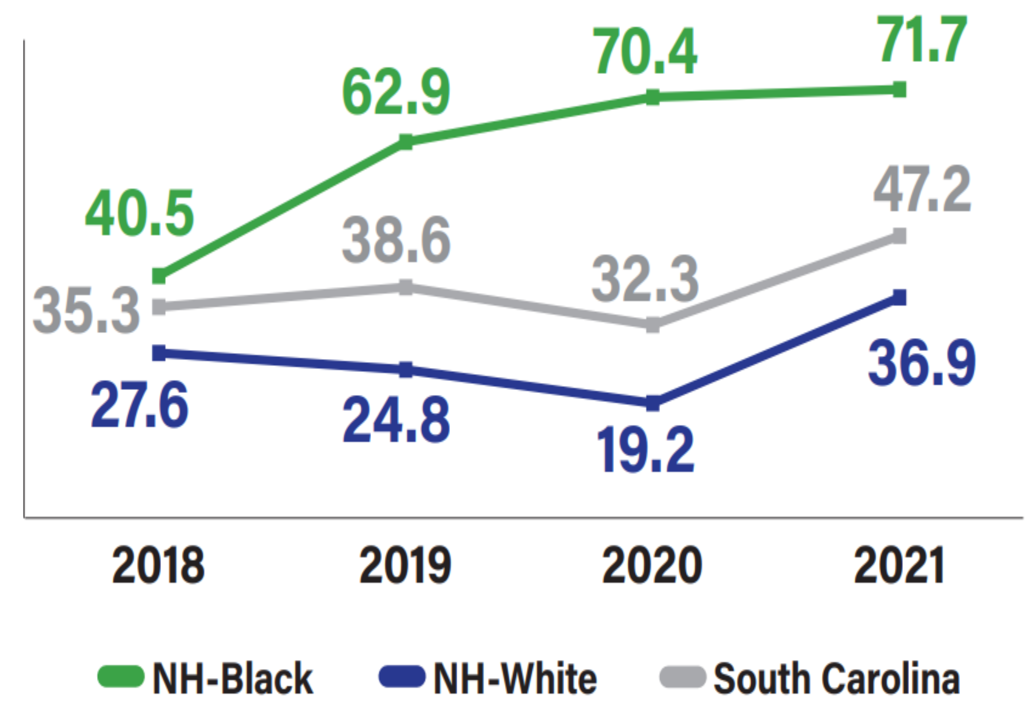
Rate per 100,000 live births



2021 Data Note	
Cases Reviewed	88
Pregnancy-Related Deaths	27
Live Births	57,179
PRMR	27 / 57,179 X 100,000

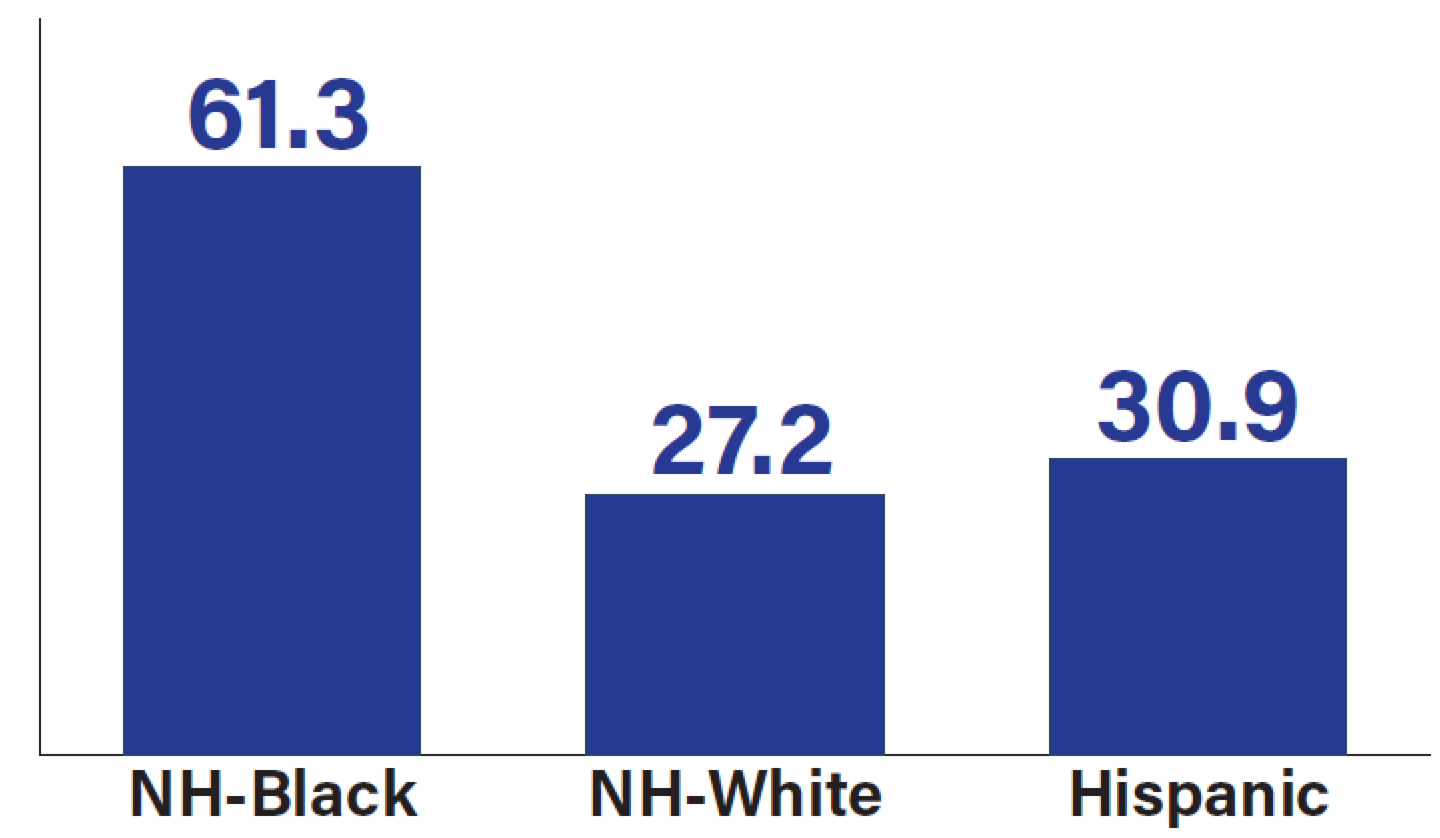
Trend in Pregnancy-Related Mortality Rate, by Race and Ethnicity

Rate per 100,000 live births



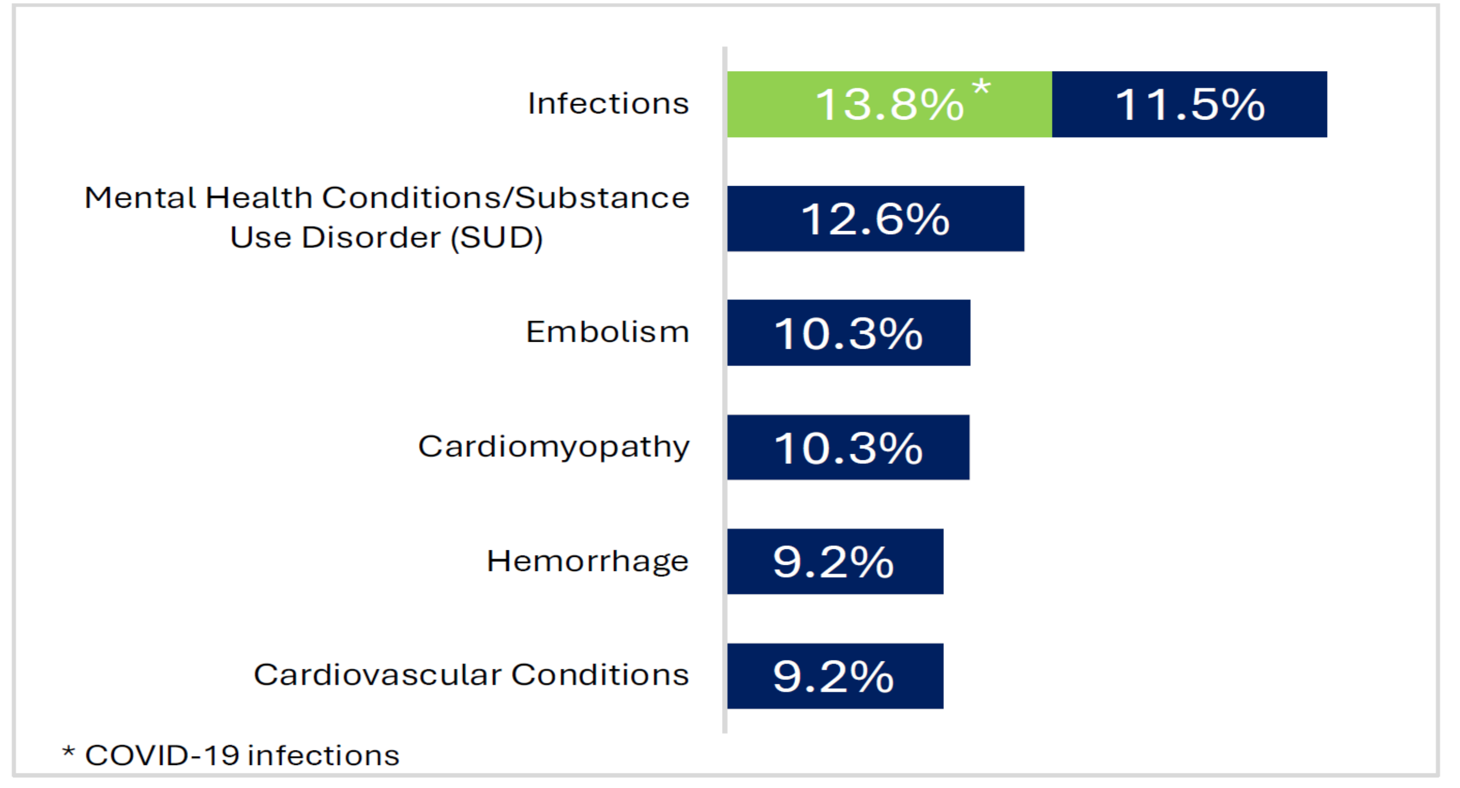
Pregnancy-Related Mortality Rate, Race and Ethnicity, 2018-2021

Rate per 100,000 live births



Leading Causes of Pregnancy-Related Deaths

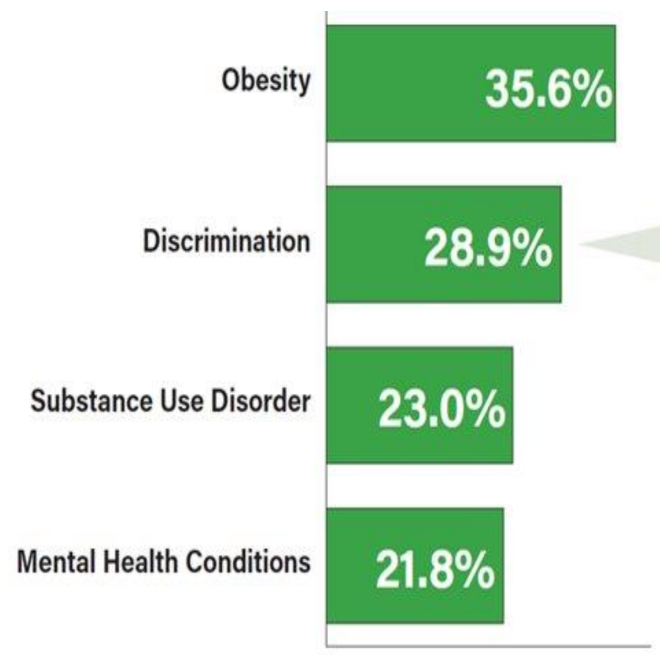
Percent of pregnancy-related deaths; 2018-2021



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

Circumstances of Pregnancy-Related Deaths

Percent of pregnancy-related deaths, 2018-2021

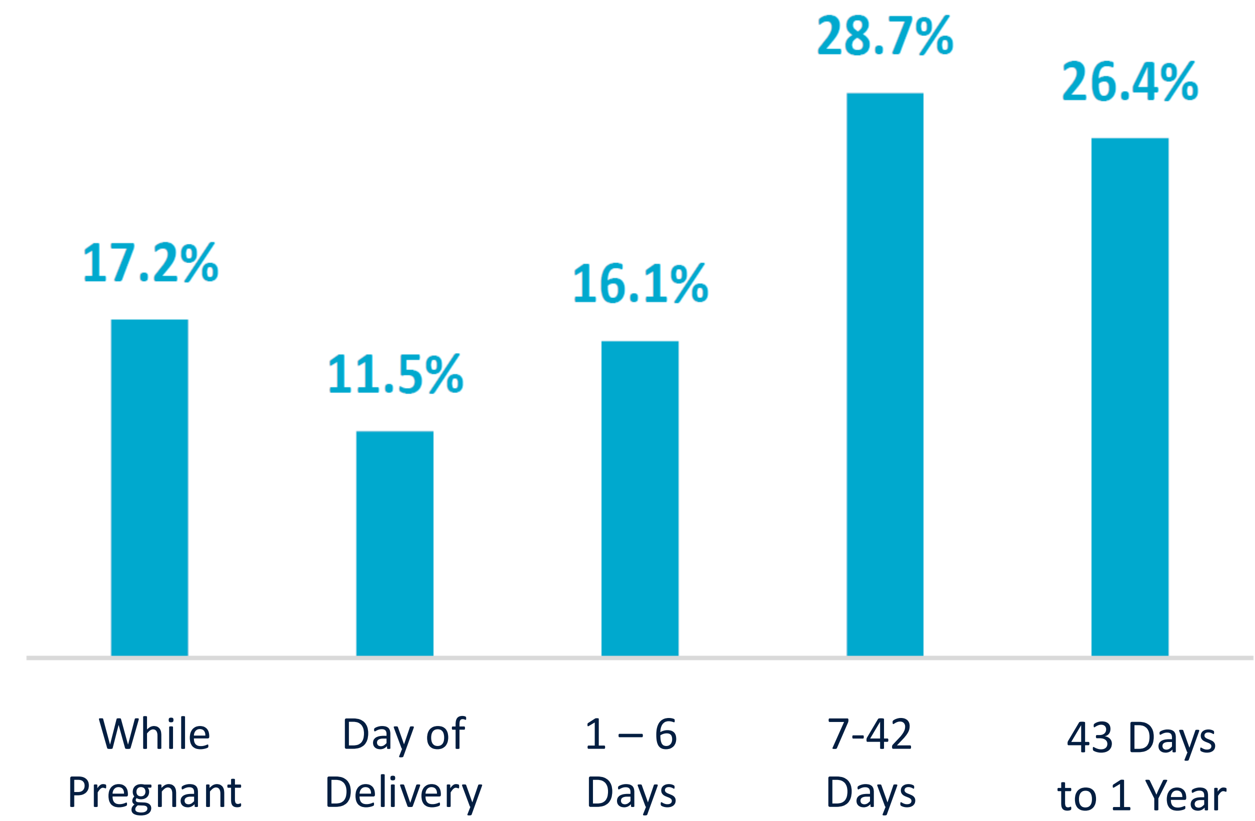


Discrimination

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. **Discrimination was recognized as the contributing factor in almost one third of the pregnancy-related deaths reviewed.**

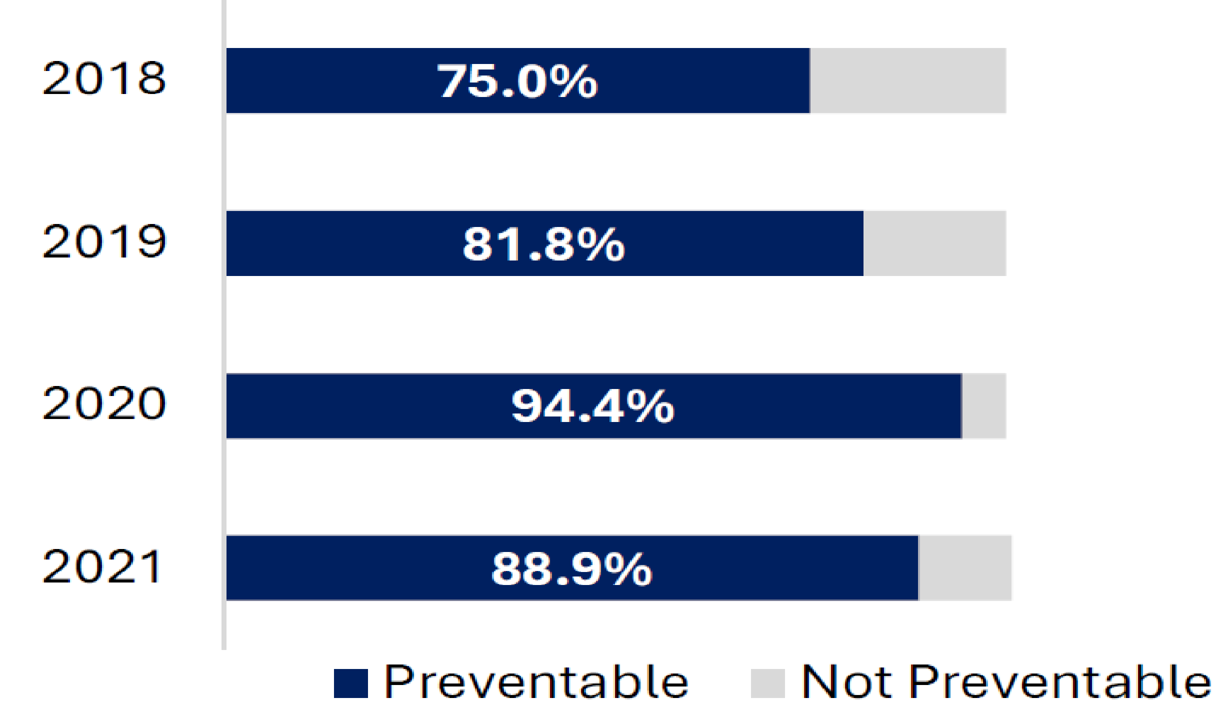
Timing of Pregnancy-Related Deaths

Percent of pregnancy-related deaths; 2018-2021



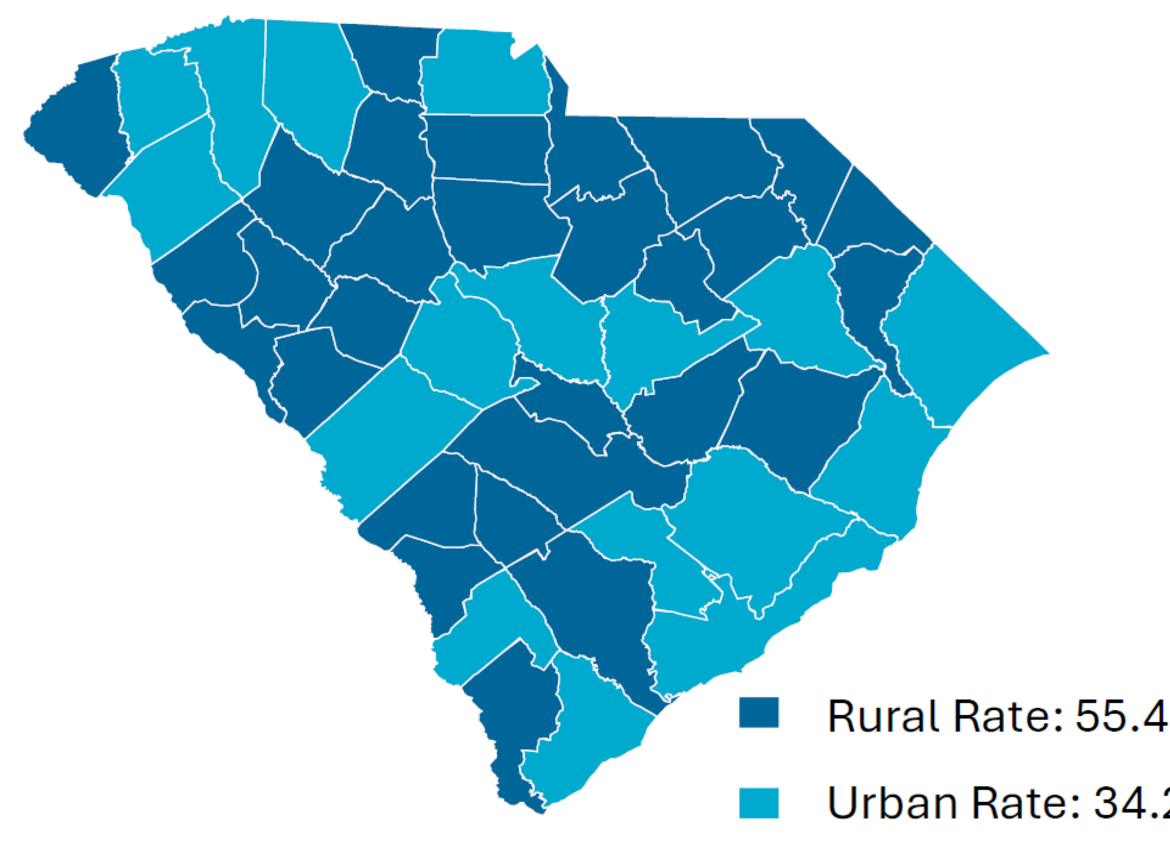
Preventability of Pregnancy-Related Deaths

Percent of pregnancy-related deaths; 2018-2021



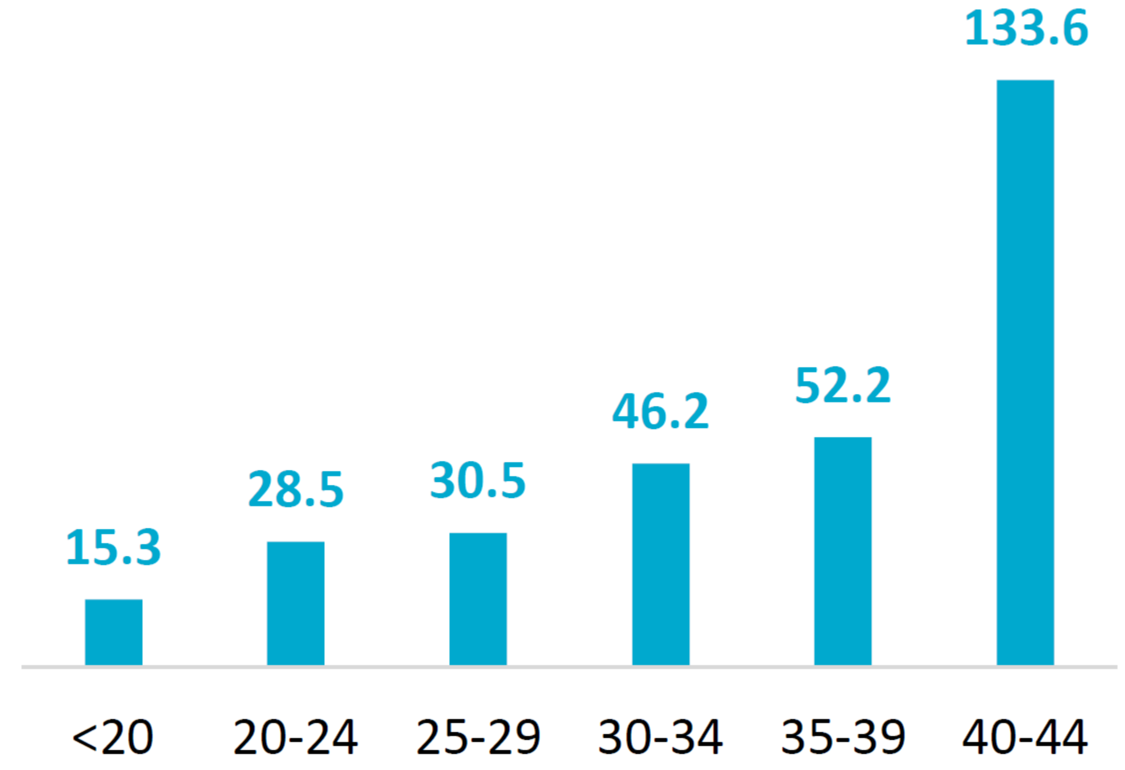
Pregnancy-Related Mortality Rate, by Urban and Rural Designation

Rate per 100,000 live births; 2018-2021



Pregnancy-Related Mortality Rate, by Age

Rate per 100,000 live births, 2018-2021



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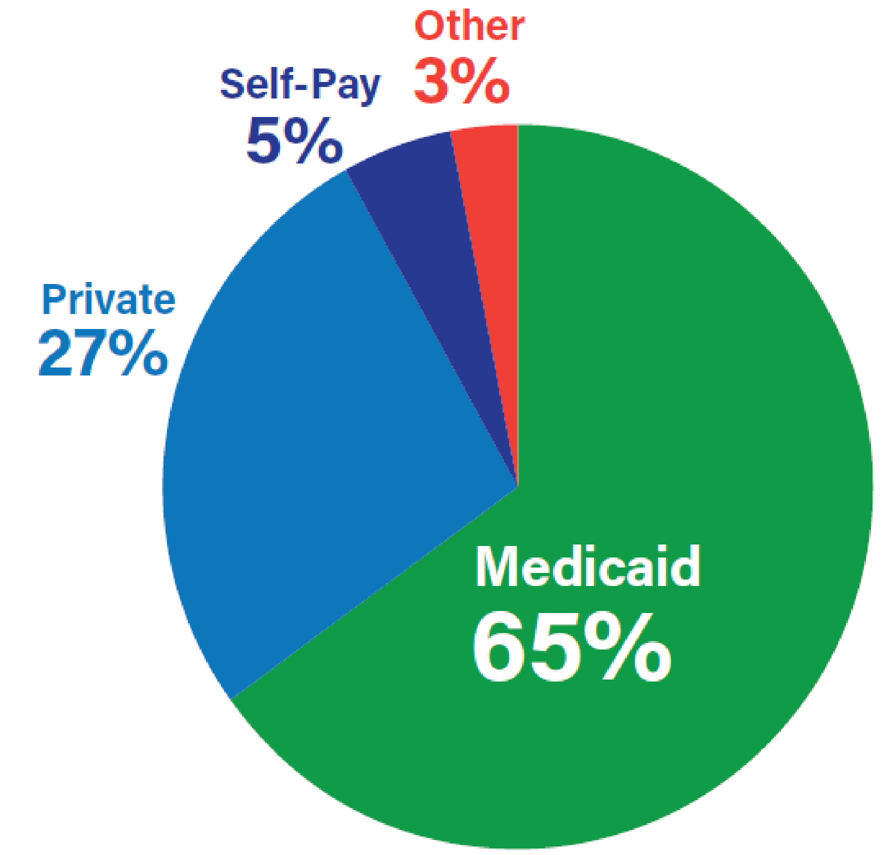
Pregnancy-Related Deaths, by Payor Source

Percent of pregnancy-related death and live births, 2018-2021



SCMMMRC recommendations 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.

- 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 of the COVID-19 and all recommendation 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 and 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 of the American College of Obstetricians and Gynecologists and Society for Fetal Medicine recommendations that the Covid-19 vaccination is safe in any trimester.

Contact Info:
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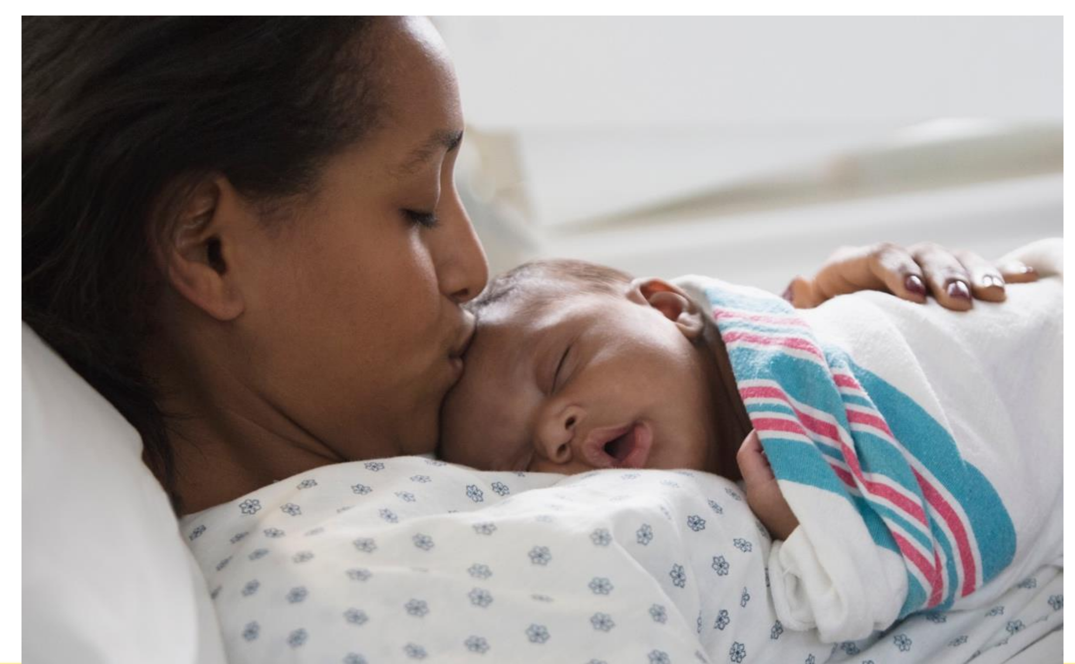


Concurrent Maternal Health Initiatives

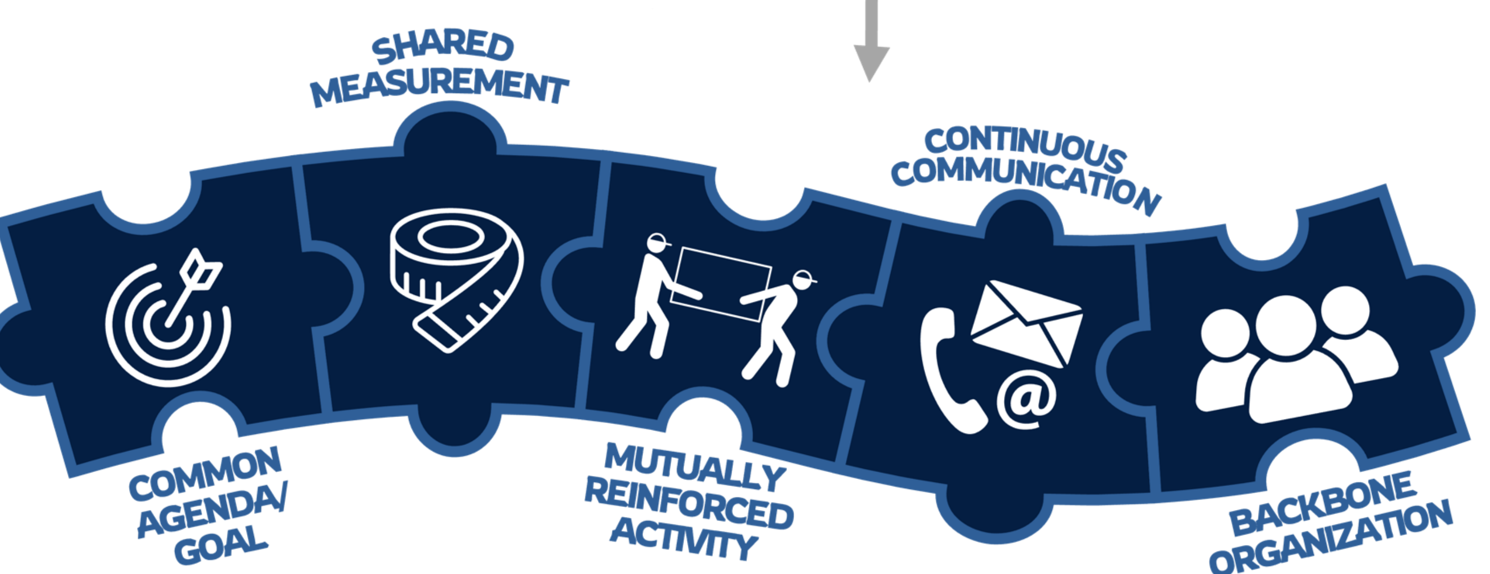
SC DPH Title V
Institute of Medicine & Public Health

UNITE WITH, INTEGRATE, ALIGN, AND COMPLEMENT THE COMPONENTS OF THESE THREE STATEWIDE INITIATIVES TO IMPROVE MATERNAL AND INFANT OUTCOMES.

MATERNAL HEALTH INNOVATION GRANT

MATERNAL AND INFANT PROJECT

MCH TITLE V NEEDS ASSESSMENT



COLLECTIVE IMPACT

This framework aims to address complex issues in local communities by aligning multiple organizations and stakeholders around a shared goal to achieve large-scale positive changes.

The collective impact approach aims to foster collaboration, minimize duplication of efforts, prevent partner burnout, complement current efforts, and eliminate contradicting elements.

INCORPORATE THE THREE STATEWIDE PLANS INTO THE WRITING OF THE MCH CHAPTER OF THE SC SHIP.

MATERNAL & INFANT STATEWIDE HEALTH IMPROVEMENT INITATIVES	CYCLE	POPULATION DOMAINS	AIM	FIRST MEETING	IMPLEMENTATION	MEETING SCHEDULE
MATERNAL HEALTH INNOVATION GRANT	5 YEARS	Maternal	Impact and reduce **infant and maternal mortality and morbidity.**	AUG 2024	AUG 2024	Aug 2024 Dec 2024 Mar 2025 Jun 2025 Sep 2025
MATERNAL AND INFANT PROJECT	10* YEARS	Infant & Maternal	Impact and reduce **infant and maternal mortality and morbidity** with focus on **access to care.**	AUG 2024	MAY 2025	Aug 2024 Sep 2024 Oct 2024 Nov 2024 Dec 2024 Jan 2025 Feb 2025 Mar 2025
MCH TITLE V NEEDS ASSESSMENT	5 YEARS	Infant Maternal Children Adolescent & CYSHCN	Impact **overall health** throughout all five domains.	SEP 2024	JUL 2025	Sep 2024 Jan 2025 Apr 2025 Jun 2025

*Includes 1-, 3-, and 10- year milestone and action items.

SHIP: STATE HEALTH IMPROVEMENT PLAN MATERNAL/INFANT	CYCLE	POPULATION DOMAINS	AIM	FIRST MEETING	IMPLEMENTATION
	5 YEARS	Infant & Maternal	Impact and reduce **infant and maternal mortality.**	JAN 2024	JAN 2025

Panel Discussion

Community Birth Workers in Clinical Settings

Panel Discussion: Community Birth Workers in Clinical Settings

- This panel will explore the evolving role of community-based maternal health workers, examine barriers to integration, and discuss strategies to foster stronger partnerships between clinical and community providers.

Participants

Jeffery Hall, MD

Clinical Professor of Family & Preventive Medicine

University of South Carolina

Keisha Lockhart, DNP, CMN

Primary Care Pediatric Nurse Practitioner and Nurse Midwife, Founder & Owner

AfterBirth, LLC

Sara Covington-Kolb, CCHW, MSPH, MSW

Program Impact Manager

Center for Community Health Alignment

Symon'e Johnson

Certified Holistic Doula, Founder & Owner

Pamoja Partnership

Rho Sims

Community Organizer

Black Maternal Health Collective & Preeclampsia Foundation

Stormi Harmon

Certified Holistic Doula & Doula Trainer, Founder & Owner

Set Apart Collective

Panel Discussion

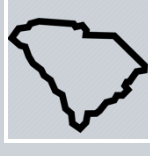
Community Birth Workers in Clinical Settings

Partners in Innovation

An Overview of Projects Supported by MHI

MHI Supported Projects

SCMMMRC Nurse Abstractors



South Carolina State University

- Mommy's Café
- Unite South Carolina

Project ECHO

MHI Supported Projects

SIMCoach

Expansion to emergency departments and non-birthing hospitals

Prisma Health Clinical Consultant

Low fidelity, simulation-based curriculum

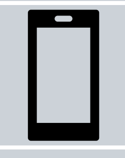
Virtual training opportunities for rural providers

USC MCH Catalyst Student Internships

University of South Carolina's Institute for Families in Society (IFS)

Maternal Health Resource Hub

- AI Chat Box Integration
- Localized Data
- Empowerment & Literacy



USC College of Engineering and Computing

Alliance for Innovation Community Care Initiative (AIM CCI)

Institute for Families in Society

SIMCoach Evaluation

USC Patient Engagement Studio

Perinatal Advisory Council

Small Grants Program

Break

Chat Question

If you could instantly master one skill, what would it be and why?

Breakout Sessions: Workgroups

Data Collection, Analysis, & Distribution

Service Delivery

Workforce Development

Empowerment & Literacy

Next Steps

- Post Meeting Survey

- Next Meetings
    - Workgroups
        - May 2025
    - MHTF
        - June 17, 2025

https://redcap.link/scmhic3

THANK YOU!

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