NEW YORK STATE DEPARTMENT OF HEALTH: MATERNAL MORTALITY REVIEW INITIATIVE

NEW YORK STATE PREGNANCY-ASSOCIATED MORTALITY REVIEW 2018

BACKGROUND INFORMATION

Public Health Law § 2509, enacted in 2019, established the Maternal Mortality Review Board (MMRB) in the New York State Department of Health (NYSDOH) to review pregnancy-associated deaths in New York State (NYS) and make recommendations to prevent future deaths. The MMRB directly reviewed deaths occurring in NYS counties outside of New York City (NYC), while the NYC Maternal Mortality and Morbidity Review Committee reviewed deaths in NYC. The committees' collective efforts form a comprehensive set of statewide reviews. NYSDOH analyzed and reported the statewide results and recommendations in the *New York State Report on Pregnancy-Associated Deaths in 2018*.

DEFINTIONS

PREGNANCY-ASSOCIATED DEATH

Death of a woman from any cause within one year of pregnancy, including death while pregnant

PREGNANCY-RELATED DEATH
Death within one year of pregnancy, either directly caused or exacerbated by the pregnancy

PREGNANCY-ASSOCIATED, BUT NOT RELATED DEATH
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 RELATEDNESS DEATH
Death during pregnancy or within one year of the end of pregnancy where it cannot be determined from the available information whether the cause of death was related to pregnancy

MATERNAL MORTALITY REVIEW PROCESS

1. Maternal Mortality Review Initiative (MMRI) staff identifies potential pregnancy-associated deaths.
2. MMRI staff gathers records for each pregnancy-associated death.
3. Abstractors enter information and prepare case summaries using a standardized review tool: CDC's Maternal Mortality Review Information Application (MMRIA)[1].
4. MMRB member reviewers examine the case abstraction and prepare to present the case to the Board.
5. During the MMRB meetings, Board members review and discuss each case summary and determine pregnancy-relatedness, preventability, and contributing factors leading to death, as well as propose focused recommendations for action.

OVERVIEW OF NYS PREGNANCY-ASSOCIATED DEATHS

117 PREGNANCY-ASSOCIATED DEATHS IN 2018

35% (N=41) PREGNANCY-RELATED

48% (N=56) PREGNANCY-ASSOCIATED, BUT NOT RELATED

78% OF PREGNANCY-RELATED DEATHS WERE PREVENTABLE

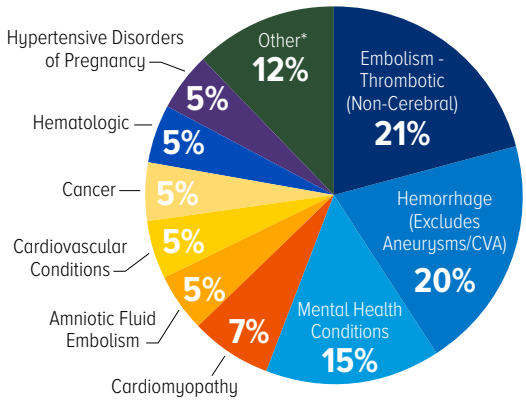
% OF PREGNANCY-RELATED DEATHS BY TIMING OF DEATH

24.4% While Pregnant

51.2% Within 42 Days

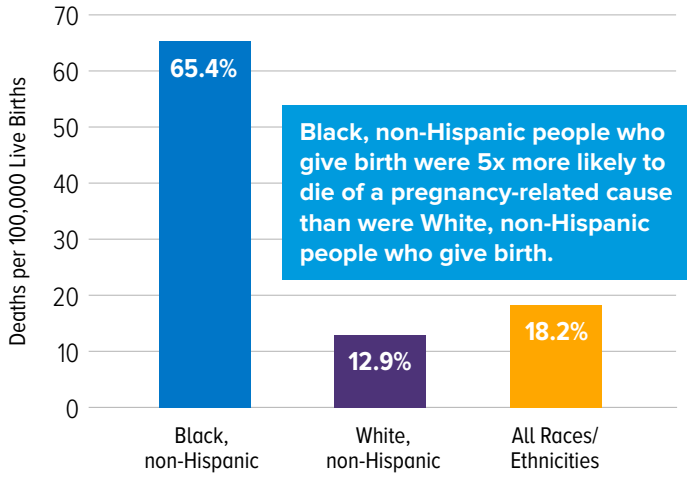
24.4% 43 Days to 1 Year

FIGURE 1. LEADING CAUSES OF PREGNANCY-RELATED DEATHS



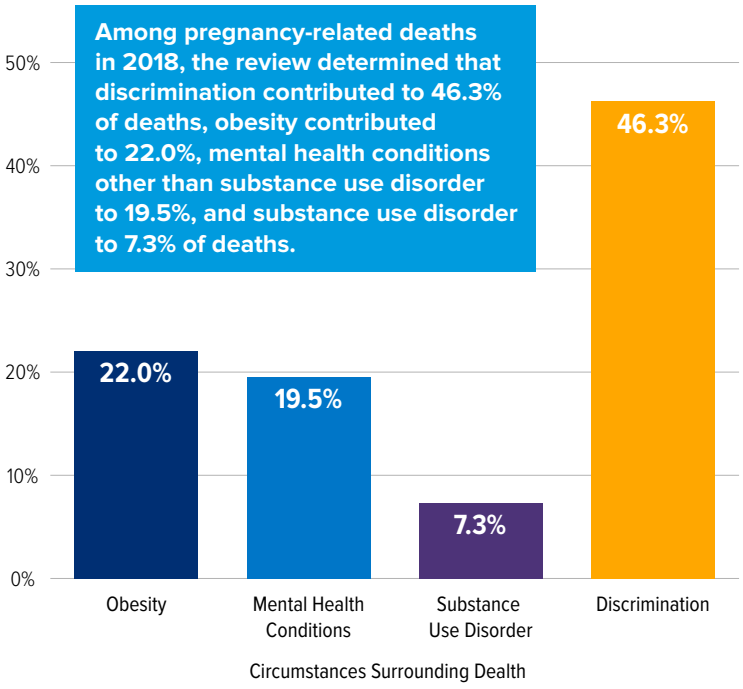
*Other includes Cerebrovascular Accident not Secondary to Hypertensive Disorders of Pregnancy, Gastrointestinal Disorders, Infection, Metabolic/ Endocrine Disorders, and Unknown Causes

FIGURE 2. PREGNANCY-RELATED MORTALITY RATIO BY RACE/ETHNICITY



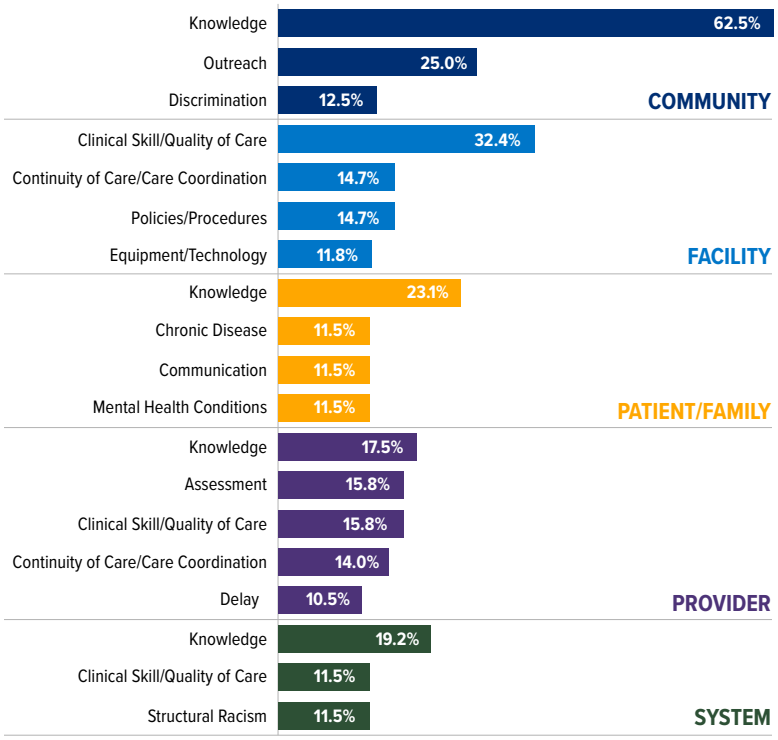
[1] Maternal Mortality Review Information Application (MMRIA) https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/MMRIA.html

FIGURE 3. DISTRIBUTION OF CIRCUMSTANCES SURROUNDING PREGNANCY-RELATED DEATHS



*One death can have multiple circumstances surrounding death.

FIGURE 4. MOST COMMON FACTORS ASSOCIATED WITH PREGNANCY-RELATED DEATHS BY CONTRIBUTING FACTOR LEVEL[2]



KEY RECOMMENDATIONS FROM THE NEW YORK STATE MATERNAL MORTALITY REVIEW BOARD

FACILITY LEVEL

- Hospitals should implement the Alliance for Innovation on Maternal Health (AIM) bundle[3] to reduce cesarean delivery rates.
- Hospitals should ensure anesthesiologists and obstetricians follow a standard protocol for massive transfusion in hemorrhage during pregnancy, delivery, and postpartum.
- All facilities should implement screening for venous thromboembolism and chemoprophylaxis during intrapartum and postpartum care.
- All facilities should implement universal systems for quantification of blood loss and anesthesia during delivery and postpartum.

PROVIDER LEVEL

- The Department, American College of Obstetricians and Gynecologists District II (ACOG DII), and partners, should develop a cardiac bundle to assist with provider education.
- The Department, ACOG DII, and partners should develop an issue brief on the importance of the involvement of multidisciplinary specialists in chronic care management during antenatal, intrapartum, and postpartum care.
- Obstetricians and other providers should utilize a multidisciplinary approach for collaborative chronic care management of obstetrical patients including the postpartum period.
- The Office of Mental Health, ACOG DII, and partners should develop materials to educate providers on behavioral health evaluation, treatment, and understanding of patient barriers to seeking care.
- Obstetrical providers and hospitals should engage community resources during prenatal and hospital discharge planning (e.g., doulas, visiting nurses, community health workers/patient navigators, telehealth, and remote monitoring) to help support and link high risk mothers with chronic conditions and difficult access (e.g., rural areas) to follow-up care and community resources.

SYSTEM LEVEL

- The Department should implement a maternity medical home model of care and convene a multi-stakeholder group to develop standard guidance about additional psychosocial services and coordination of care which includes trauma and social determinants of health.
- The Department and partners should develop systemic approaches to reduce structural racism.
- The Department should expand Medicaid coverage to include one year postpartum.
- The Department, ACOG DII, and partners should develop an emergency room bundle for the care of pregnant women.
- NYS should offer all families at least one home visit from a nurse or paraprofessional within two weeks postpartum to educate patients and families about signs and symptoms of potential complications.

LINK TO REPORT NYS REPORT ON PREGNANCY-ASSOCIATED DEATHS IN 2018

[2] Contributing Factors Descriptions (page 4) CommitteeDecisionsForm-mmria-form-v21-fillable1_0.pdf
[3] AIM: Safe Reduction of Primary Cesarean Birth Bundle https://safehealthcareforeverywoman.org/council/patient-safety-bundles/maternal-safety-bundles/safe-reduction-of-primary-cesarean-birth-aim/

NEW YORK STATE Department of Health