NEW YORK STATE | Department of Health

MEDICAL SOCIETY OF THE STATE OF NEW YORK
ORGANIZED 1807

PREVENTING MATERNAL MORTALITY: RECOMMENDATIONS FOR ACTION

DR. JAMES MCDONALD, MD, MPH
COMMISSIONER

COMMISSIONER'S MEDICAL GRAND ROUNDS | JANUARY 16, 2025 | NOON – 1PM EST

OPENING REMARKS

Dr. James McDonald, MD, MPH

New York State Commissioner of Health

NEW YORK STATE | Department of Health

Q & A

EMAIL US YOUR QUESTIONS

GRANDROUNDS@HEALTH.NY.GOV

NEW YORK STATE | Department of Health

CONTINUING EDUCATION INFORMATION

To Obtain Continuing Education Credits:
To receive credit, you must stay for the entire live session.
The post-test link will be shared on the screen after the session concludes, both as a QR code and a link.

Be sure to use the **same email address** you registered for the webinar with to complete the post-test.

Accreditation is **only** available for the live session.
The recording will be posted after the session, but will not offer any credit.

Accreditation Statement: The Medical Society of the State of New York (MSSNY) designates this Grand Rounds session for a maximum of *1.0 AMA PRA Category 1 Credits™.*

Physicians should claim credit commensurate with their participation.

NEW YORK STATE | Department of Health

DISCLOSURES

**J ohn Maese, MD owns stock in Eli Lilly and Company, Johnson & Johnson, Danaher Corporation, Takeda Pharmaceutical Company Limited and Bausch Health Companies Inc.

** Mary E. D'Alton, MD serves as a consultant for Johnson & Johnson.

The planners, moderator and other individuals in control of content for this activity have no financial relationships or affiliations with ineligible companies whose products, research or services may be discussed in this activity. All relevant financial relationships have been mitigated.

**No commercial funding has been accepted for this activity.

NEW YORK STATE | Department of Health

PLEASE COMPLETE A QUICK ONE QUESTION POLL BEFORE WE CONTINUE

NEW YORK STATE | Department of Health

NEW YORK STATE | Department of Health

MEDICAL SOCIETY OF THE STATE OF NEW YORK
ORGANIZED 1807

PREVENTING MATERNAL MORTALITY: RECOMMENDATIONS FOR ACTION

MARILYN KACICA, MD, MPH
MEDICAL DIRECTOR, DIVISION OF FAMILY HEALTH

COMMISSIONER'S MEDICAL GRAND ROUNDS | JANUARY 16, 2025 | NOON – 1PM EST

POPULATION AND BIRTH DEMOGRAPHICS IN NEW YORK STATE, 2021

NYS Population

- Percentage of total New York State female population: 51%
- Estimated number: 3,921,465 women of childbearing age between 15-44 Years.

Live Births among NYS Residents:

- Total: 209,947
- Percentage occurring in a hospital setting: 96.0% (201,575 births)

Demographics:

Percentage of births to women aged 25-34: **57.2%**

- Ratio of **white non-Hispanic births** to:
  - Black non-Hispanic births: 3.75:1
  - Hispanic births: 2.13:1

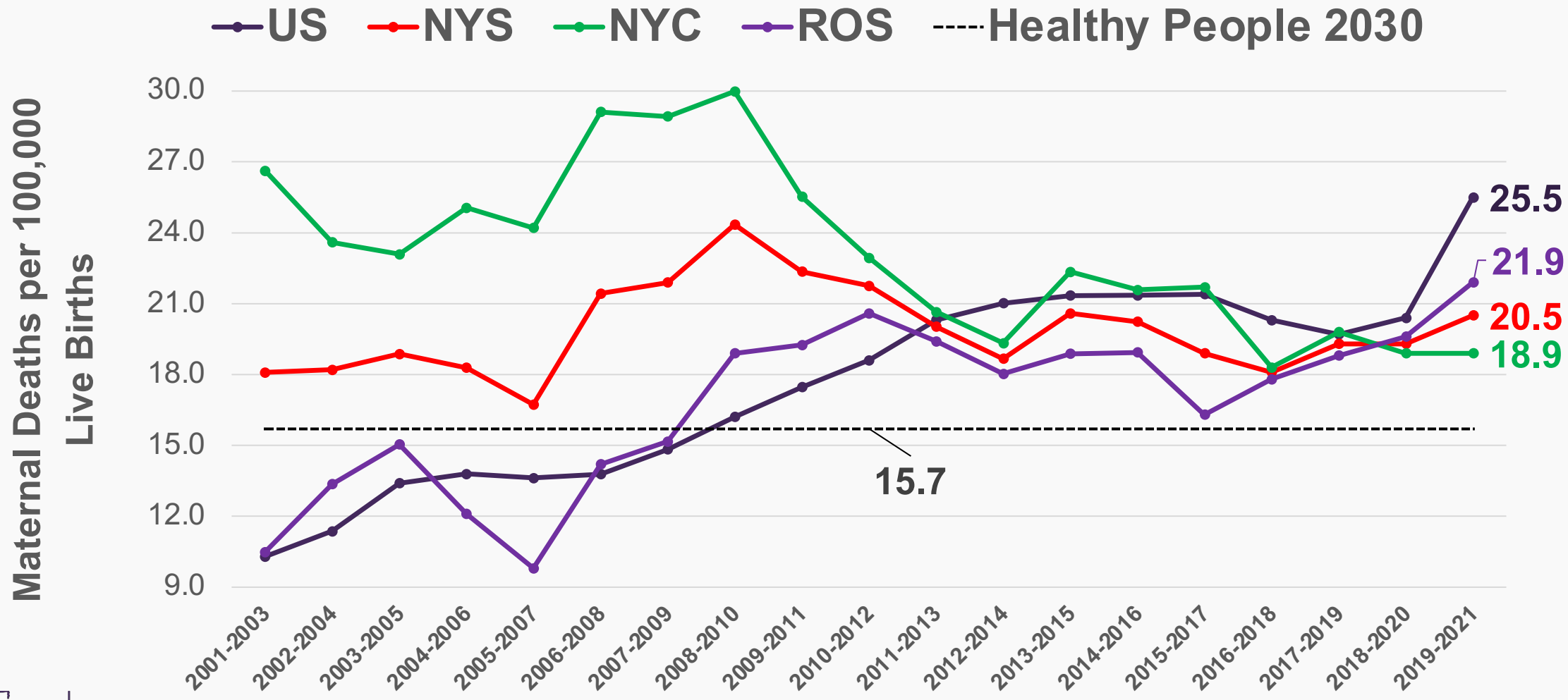
Percentage of births by primary insurance coverage:

- Medicaid and/or Family Health Plus: 48.2%
- Private insurance: 46.9%
- Other sources (self-pay, Indian Health, CHAMPUS, etc.): 4.9%

NEW YORK STATE | Department of Health

Source: 2021 NYS Vital Statistics Annual Summary Reports: health.ny.gov/statistics/vital_statistics/2021/#population

TRENDS IN MATERNAL MORTALITY AS REPORTED IN VITAL RECORDS*



NEW YORK STATE | Department of Health

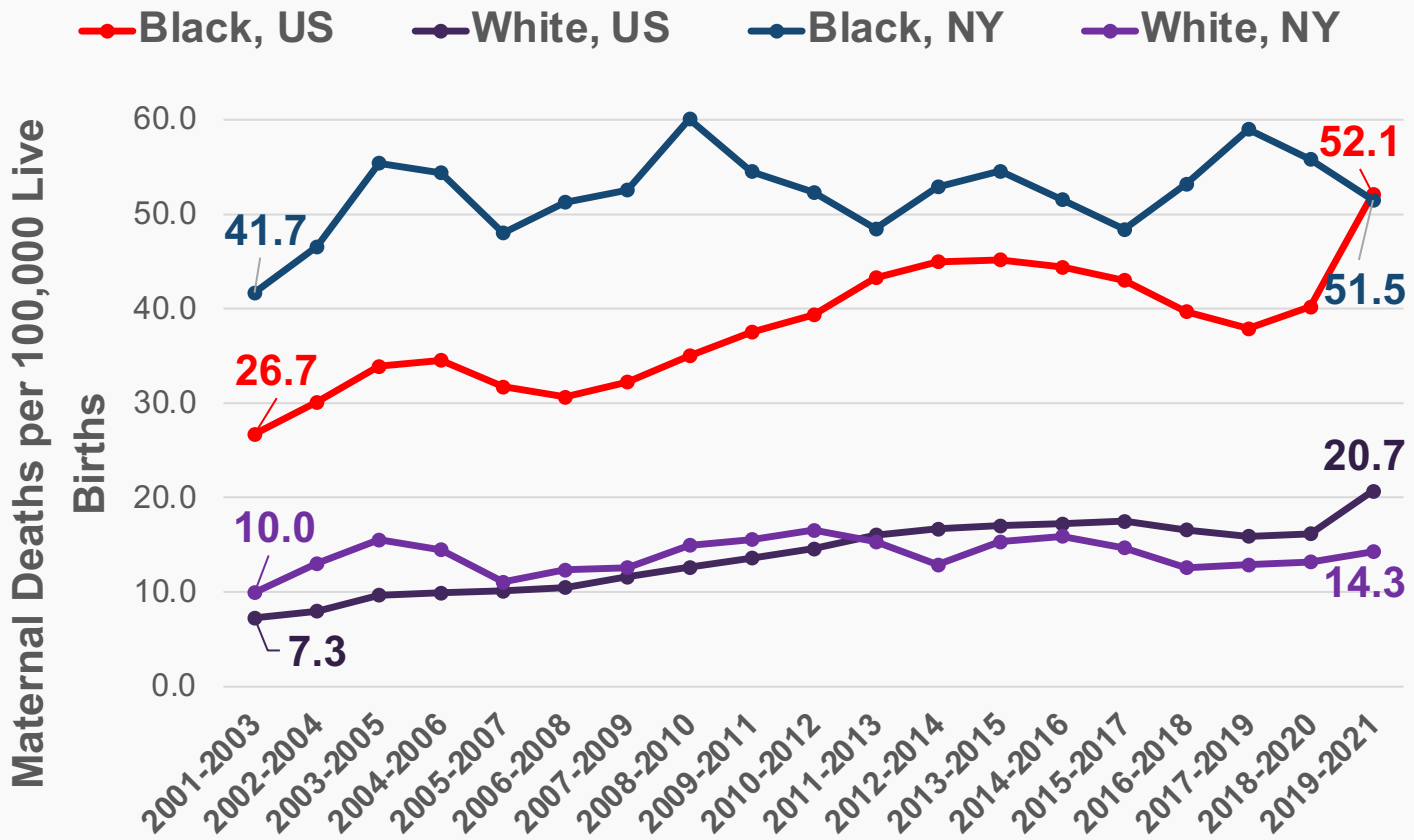
*Causes of death from death records A34, O00-O95,O98-O99 (within 42 days of the end of pregnancy)

Data Source: National Data from CDC Wonder database and NY data from New York State Vital Statistics.

MATERNAL MORTALITY HAS INCREASED AND RACIAL INEQUITIES PERSIST IN NEW YORK STATE

- In **New York State (NYS)**, Black birthing people are **~5x** more likely to die during or within a year of pregnancy than white persons[1]
- Racial inequities in maternal death in NYS have **persisted** over the last 20 years and disproportionately burden Black birthing people[2]

Figure. Trends in Maternal Death by Race in the US and New York (NY) (2001-2021) [2*]



*Causes of death from death records A34, O00-O95,O98-O99 (within 42 days of the end of pregnancy)

NEW YORK STATE | Department of Health

Sources: 1. New York State Maternal Mortality Review Report on Pregnancy-Associated Deaths, 2018-2020. Albany, NY: NYSDOH. 2023. 2. Data sources: national data from CDC Wonder database and NY data from NYS Vital Statistics. 2024. (*Causes of death from death records A34, O00-O95,O98-O99 (within 42 days of the end of pregnancy).

PREGNANCY-ASSOCIATED MORTALITY DEFINITIONS

Pregnancy-Related Death:

The death of a woman 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.

Examples:
- Hemoperitoneum/shock with ectopic pregnancy
- Uterine rupture

Pregnancy-Associated but Not Related Death:

The death of a woman during pregnancy or within one year of the end of pregnancy from a cause that was not causally related to the pregnancy.

Examples:
- Accidental overdose 26 weeks postpartum
- Head injury from car accident while pregnant

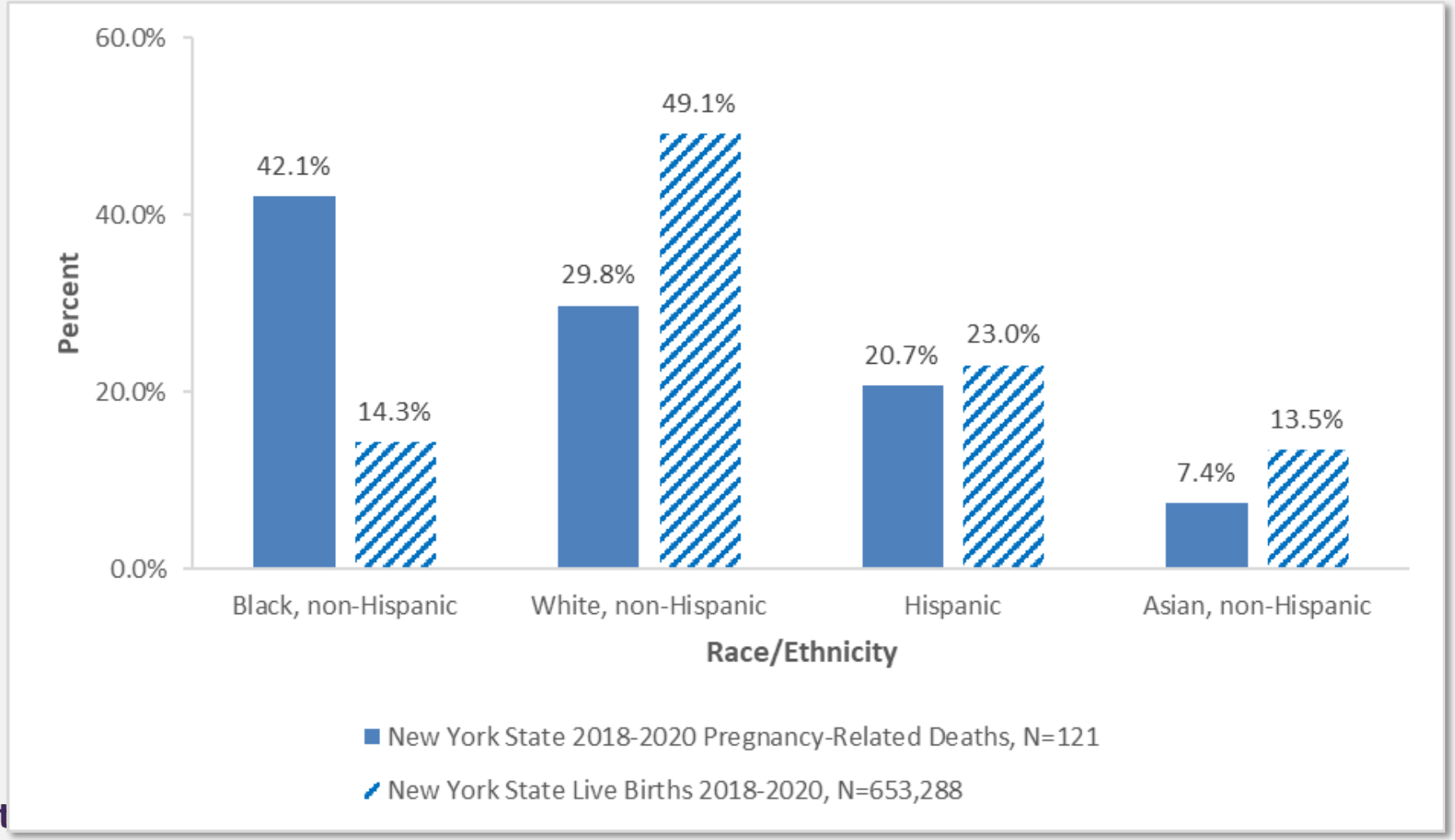
Pregnancy-Associated but Unable to Determine Relatedness:

The death of a woman while pregnant or within one year of pregnancy, due to a cause that could not be determined to be pregnancy-related or not pregnancy-related.

Examples:
- Sudden cardiac arrest with unknown cause in pregnancy/postpartum

NEW YORK STATE | Department of Health

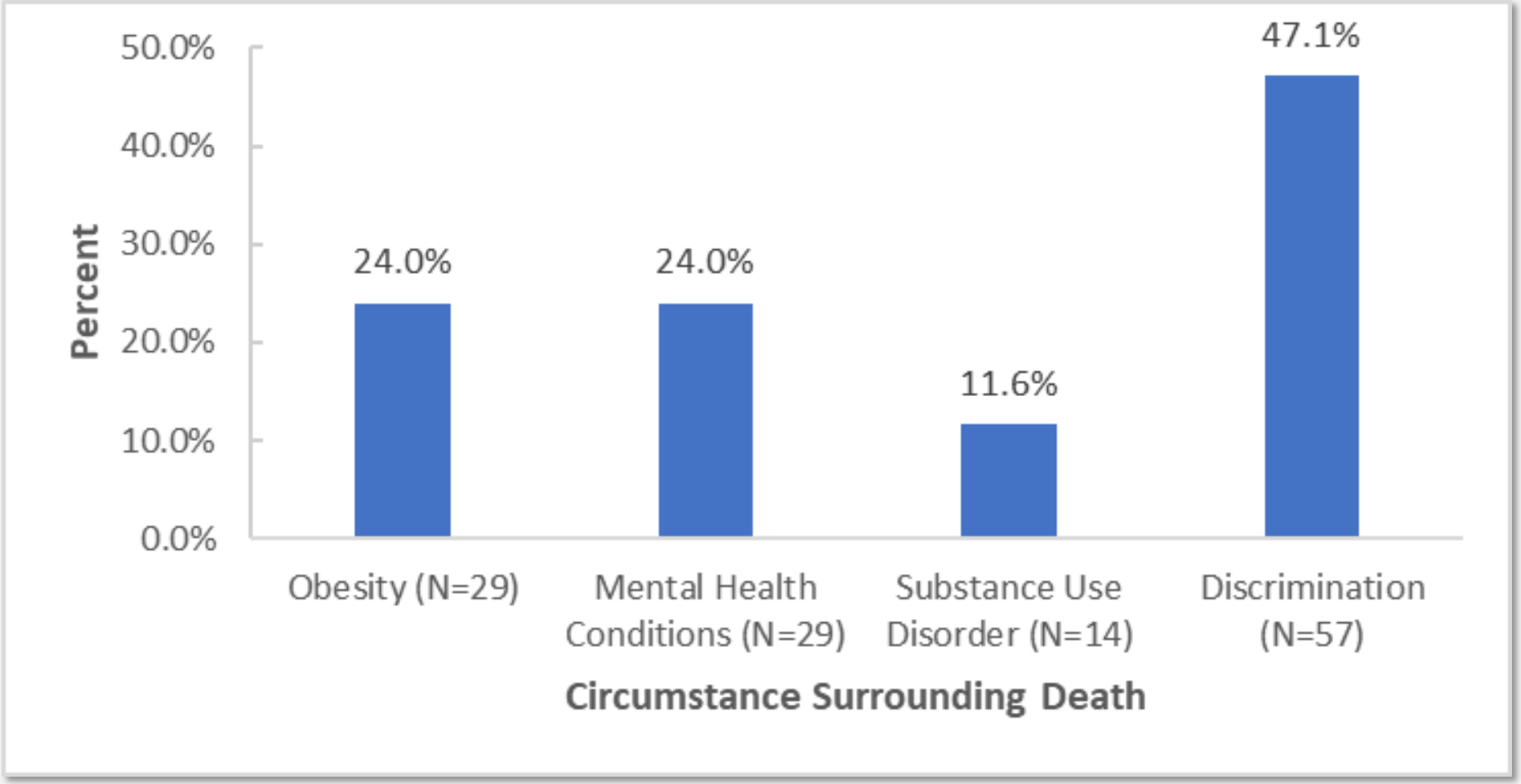
PROPORTION OF PREGNANCY-RELATED DEATHS AND LIVE BIRTHS BY RACE/ETHNICITY, 2018-2020



Data Source: New York State Maternal Mortality Review and New York State Vital Statistics

NEW YORK STATE | Department of Health

DISTRIBUTION OF CIRCUMSTANCES SURROUNDING DEATH FOR PREGNANCY-RELATED DEATHS, 2018-2020



Data Source: New York State Maternal Mortality Review

NEW YORK STATE'S OVERALL PREGNANCY-RELATED MORTALITY RATIO FOR 2018-2020

18.5 deaths per **100,000** live births
(18.2 in 2018, 19.0 in 2019, and 18.3 in 2020)

Black, non-Hispanic women had the **highest** pregnancy-related mortality ratio:

- Among all races
- For every education level
- For every Body Mass Index (BMI) level
- For both vaginal and cesarean deliveries
- For both Medicaid and private insurance

Higher mortality ratios were observed among women:

- Aged 40 years or older at the time of their death
- Who received Medicaid
- Who gave birth via cesarean section
- Who lived in New York City

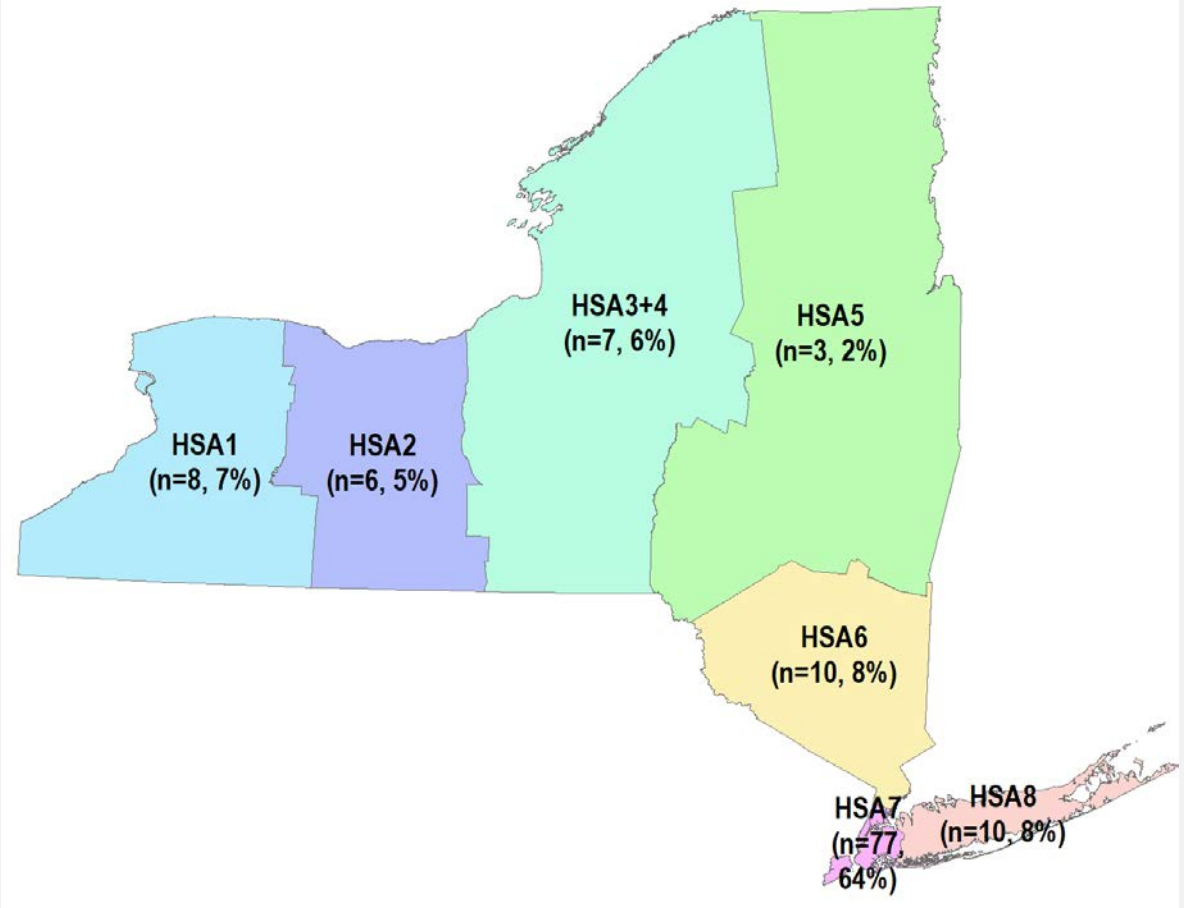
NEW YORK STATE | Department of Health

UNDERLYING CAUSES FOR PREGNANCY-RELATED DEATHS, 2018-2020

1	Hemorrhage (19.0%)
2	Embolism (14.9%)
3	Mental Health Conditions (14.9%)
4	Cardiomyopathy (8.3%)
5	Infection (8.3%)
6	Amniotic Fluid Embolism (7.4%)

NEW YORK STATE | Department of Health

DISTRIBUTION OF PREGNANCY-RELATED DEATHS BY HEALTH SERVICE AREA (HSA), 2018-2020

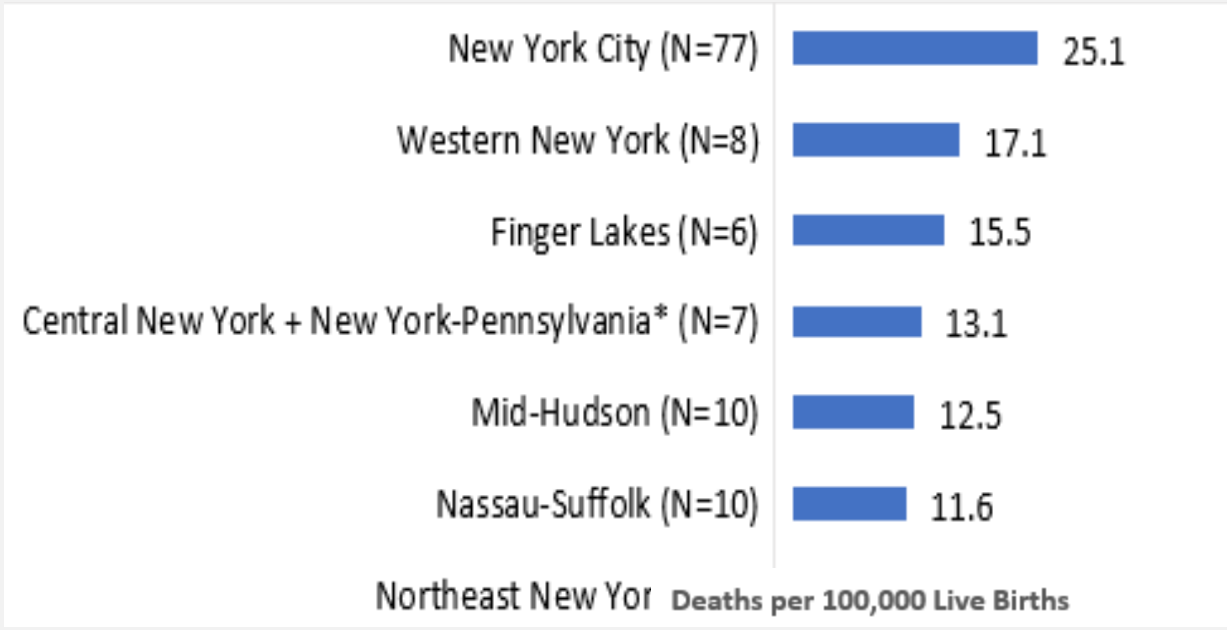


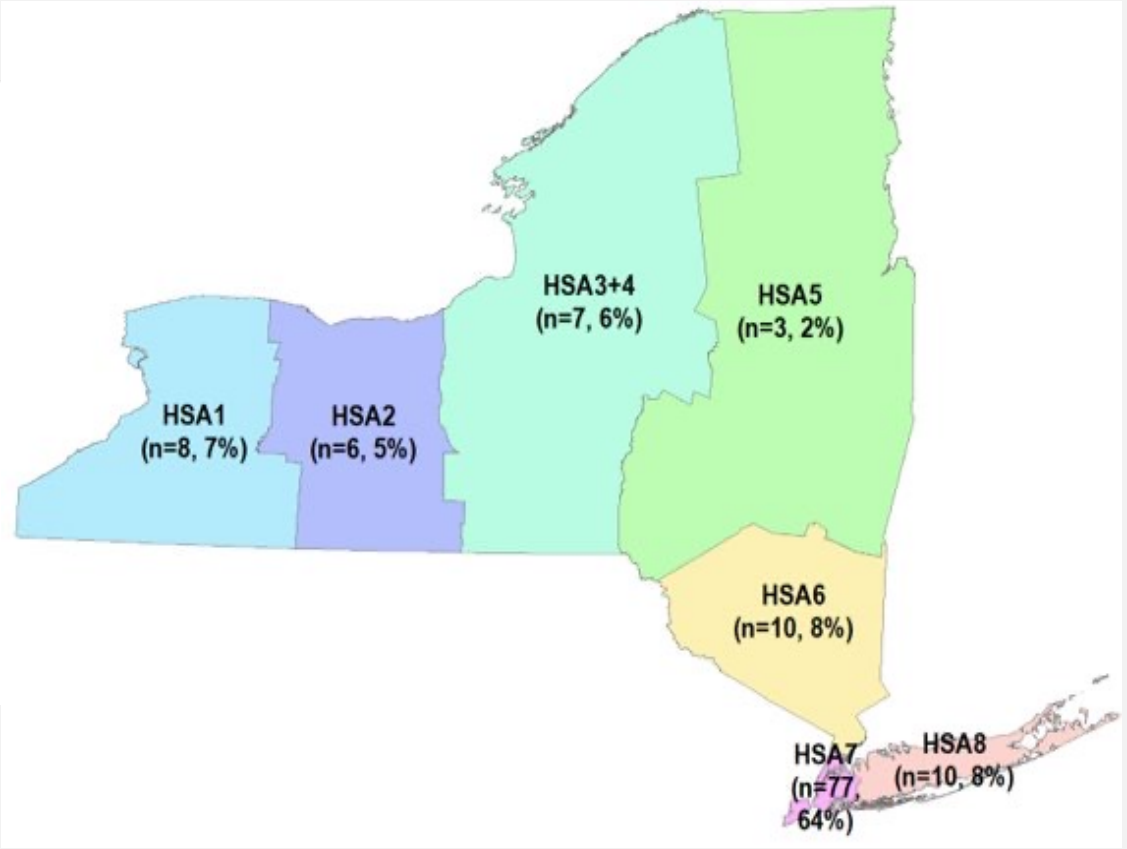
HSA Number	HSA Name
HSA 1	Western New York
HSA 2	Finger Lakes
HSA 3	Central New York
HSA 4	New York-Pennsylvania
HSA 5	Northeastern New York
HSA 6	Mid-Hudson
HSA 7	New York City
HSA 8	Nassau-Suffolk

NEW YORK STATE | Department of Health

Data Source: New York State Maternal Mortality Review

PREGNANCY-RELATED MORTALITY RATES BY HEALTH SERVICE AREA (HSA) 2018-2020





NEW YORK STATE | Department of Health

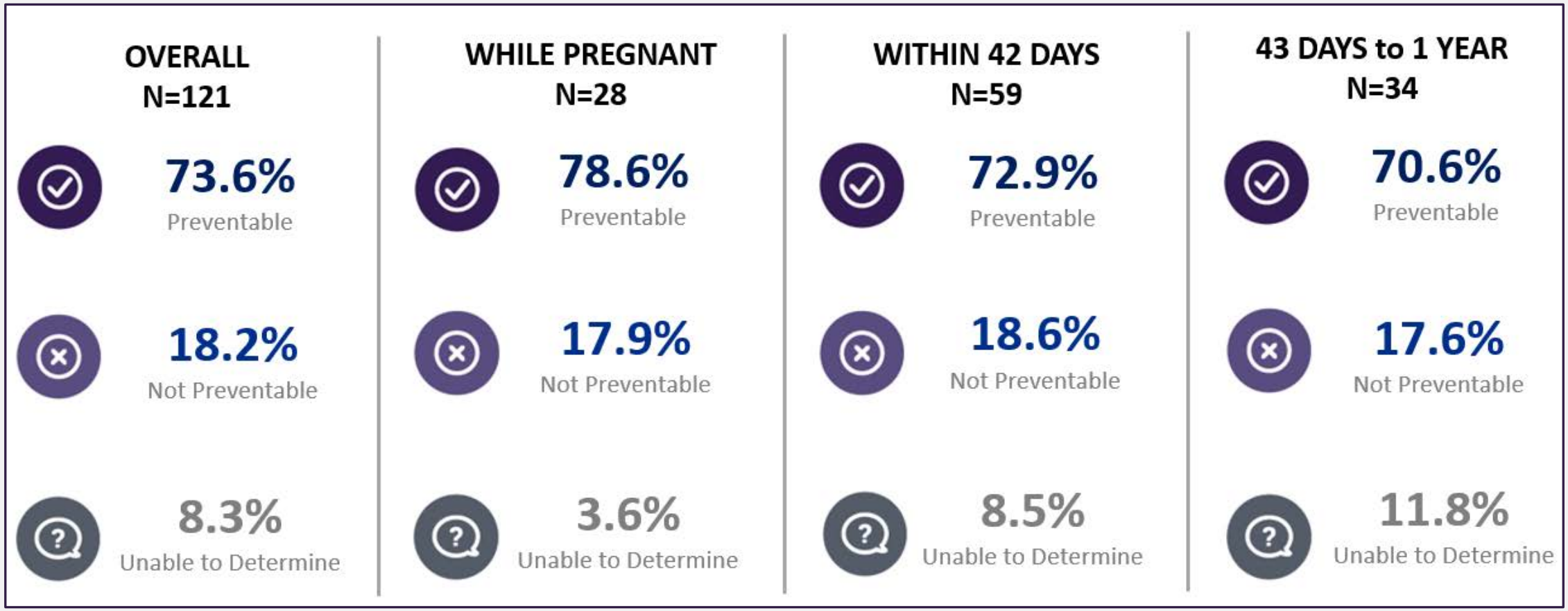
Notes: *Central New York was combined with the contiguous New York-Pennsylvania due to the latter's small cell size.

DISTRIBUTION OF PREGNANCY-RELATED DEATHS BY TIMING OF DEATH IN RELATION TO PREGNANCY, 2018-2020

NEW YORK STATE | Department of Health

Data Source: New York State Maternal Mortality Review

PREVENTABILITY AMONG PREGNANCY-RELATED DEATHS BY TIMING IN RELATION TO PREGNANCY, 2018-2020



NEW YORK STATE | Department of Health

Data Source: New York State Maternal Mortality Review

PREVENTABILITY OF THE DEATH AND CHANCE TO ALTER THE OUTCOME AMONG PREGNANCY-RELATED DEATHS, 2018-2020

Preventability	N (%)	Chance to Alter Outcome (N)			
		Good	Some	None	Unable to Determine
Preventable	89 (73.6%)	36	53	0	0
Not Preventable	22 (18.2%)	0	0	20	2
Unable to Determine	10 (8.3%)	0	0	0	10
Total	**121**	**36**	**53**	**20**	**12**

Data Source: New York State Maternal Mortality Review

NEW YORK STATE | Department of Health

SUMMARY: BOARD DETERMINATION ON CIRCUMSTANCES SURROUNDING PREGNANCY-RELATED DEATHS, 2018-2020

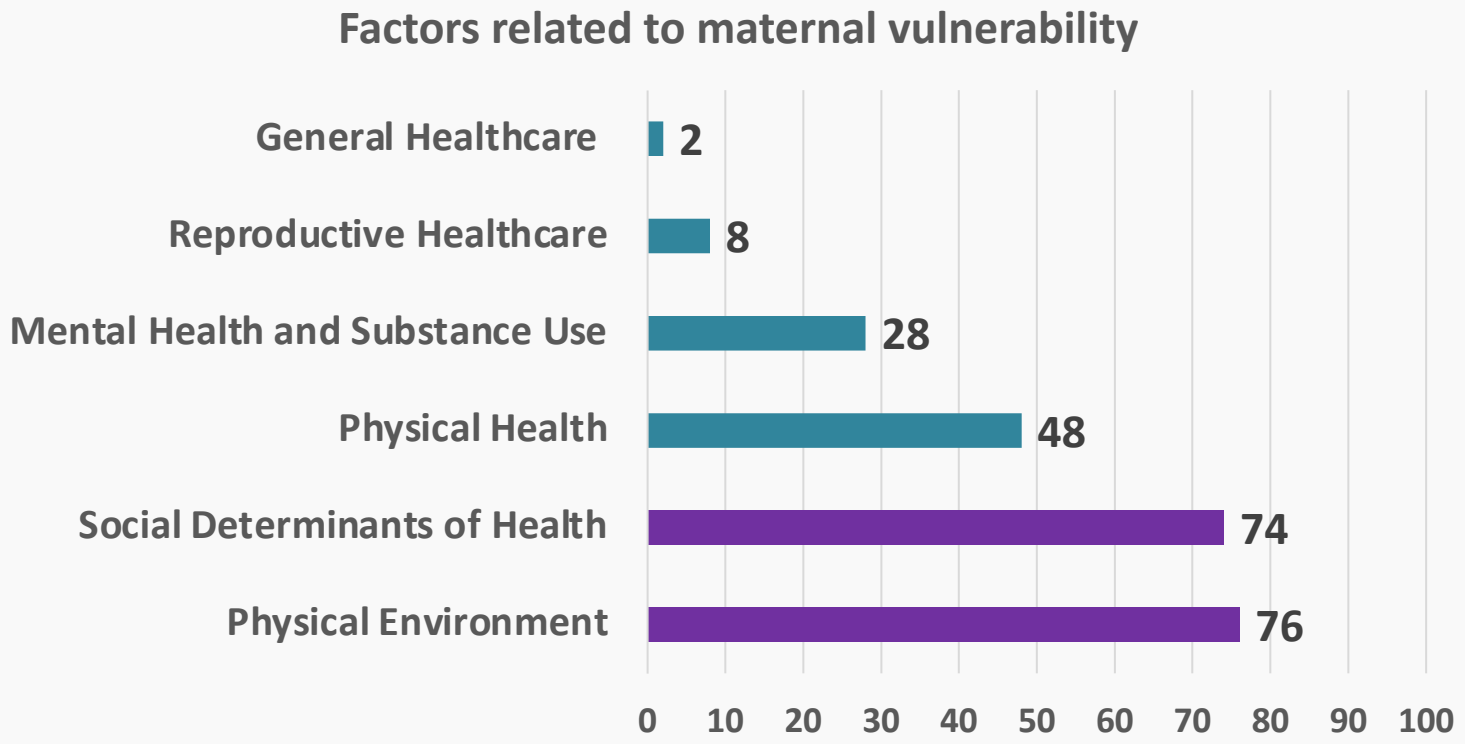
The Board judged discrimination to be a probable or definite circumstance in:

- **47.1%** of all pregnancy-related deaths and
- **60%** of Black, non-Hispanic pregnancy-related deaths

NEW YORK STATE | Department of Health

MATERNAL VULNERABILITY INDEX

(Higher scores indicate higher vulnerability)



Socioeconomic Determinants Theme:

- Key indicators scored:
  - **Educational Attainment**
  - **Poverty Levels**
  - **Food Insecurity**
  - **Social Support**

Physical Environment Theme:

- Key indicators scored:
  - **Violent Crime Rates**
  - **Housing Conditions**
  - **Pollution**
  - **Access to Transportation**

Birthing people in NYS are most vulnerable due to
socioeconomic determinants of health and physical environment.

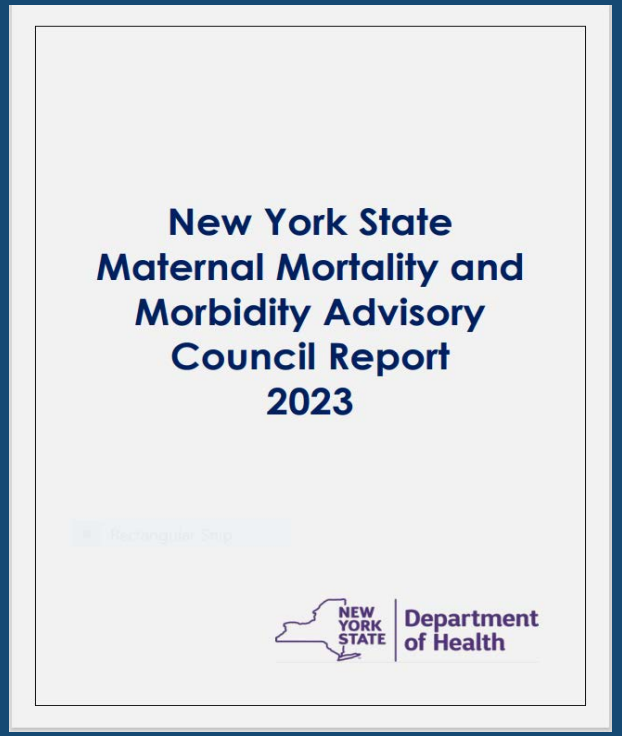
NEW YORK STATE | Department of Health

The Maternal Vulnerability Index (MVI) developed by Surgo Ventures includes United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics, 2021. Natality public-use data 2007-2020 and Underlying Cause of Death, 1999-2020. Accessed on CDC WONDER Online Database 10/26/2020. MMRs were calculated using 2016-2020 data.

MMRB AND MMMAC REPORTS

New York State Maternal Mortality Review Report, 2018-2020 (ny.gov)

Maternal Mortality and Morbidity Advisory Council Report, 2023 (ny.gov)



New York State Maternal Mortality Website:

health.ny.gov/community/adults/women/maternal_mortality

Contact us:

New York State Maternal Mortality Review Team
mmr.bml@health.ny.gov

NEW YORK STATE | Department of Health

Establishment of a State Maternal Mortality Review Board (MMRB)

August 2019

Enactment of Public Health Law 2509 provided the authority for the MMRB

The law requires the Board to:

- Have at least 15 members
- Be comprised of multi-disciplinary experts who serve and are representative of the racial, ethnic and socioeconomic diversity of the women and mothers of this state
- Members to serve a three-year term
- Meet two times a year or more frequently as deemed necessary by the Department to complete timely case review

Background

- **Complications from pregnancy can happen over the course of pregnancy, during delivery, and up to one year after the end of pregnancy**
  - Embolism
  - Hemorrhage
  - Mental health disorders and substance use disorders
  - Cardiovascular conditions

} contributors to maternal mortality and severe maternal morbidity

- **State maternal mortality review committees:**
  - Collaborate to better understand the drivers of maternal deaths
  - Report missed opportunities with identification and management of pregnancy-related emergencies in obstetric and non-obstetric settings

Purpose of Review Board

Vision:

No New York State family or community suffers a loss of a mother due to a preventable pregnancy-associated death

Mission:

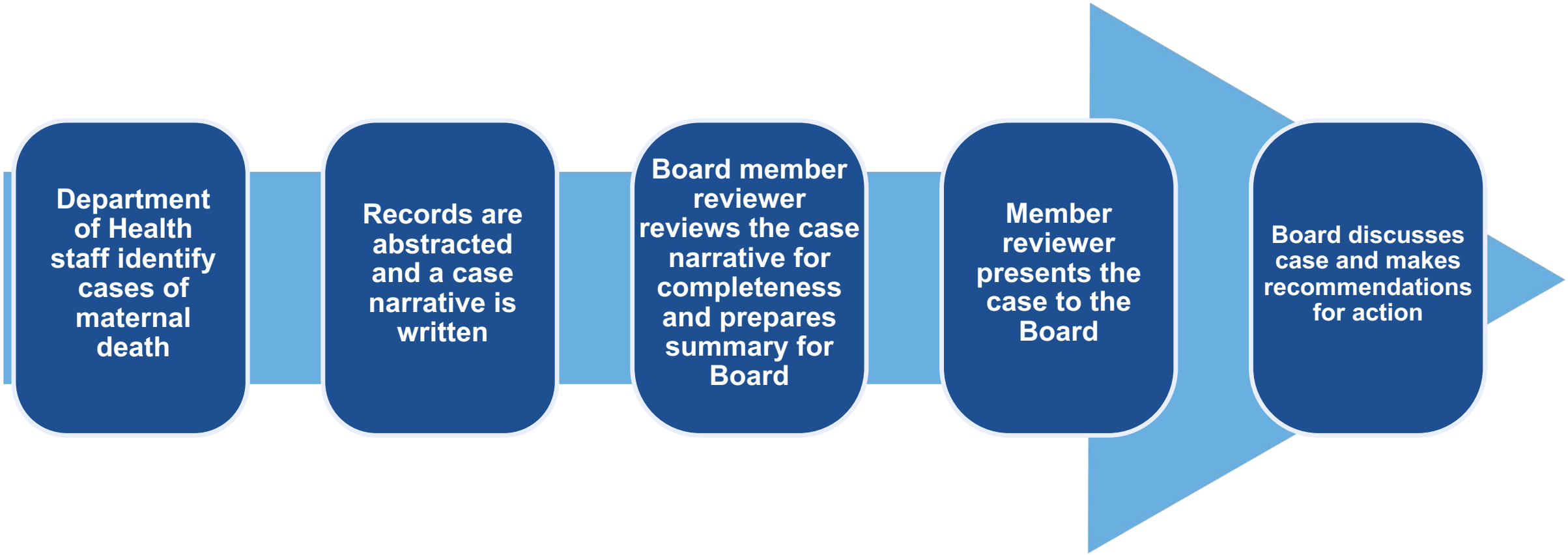
To increase awareness and knowledge of the issues surrounding pregnancy-associated deaths and to promote change among individuals, communities, and health care systems to reduce the numbers of deaths

Goals of the MMRB

- To conduct a timely, comprehensive, multidisciplinary review of all pregnancy-related and select pregnancy-associated deaths within two years of the date of death

- To identify and prioritize actionable recommendations to prevent future deaths

New York State Maternal Mortality Review



COLUMBIA | OBSTETRICS AND GYNECOLOGY

NEW YORK STATE | Department of Health Maternal Mortality Review Board

MMRB Focus

Board provides a multidisciplinary review of each maternal death through an assessment of:

- Causes of death
- Factors leading to death
- Preventability
- Opportunities for intervention- what actions, if implemented, might have changed the course of events for this death and recommends action for the prevention of future deaths

Factor Identification

Factors Contributing to Pregnancy-Related Deaths

- After reviewing each case, factors contributing to the death are identified
- The factors are sorted into one of 28 specific contributing factor classes such as:
  - **discrimination, structural racism, unstable housing, social support or isolation, violence, clinical skills/quality of care, etc.**
- In addition, each factor is categorized into one of the five levels:
  - **community, facility, patient/family, provider, or system**

Recommendations

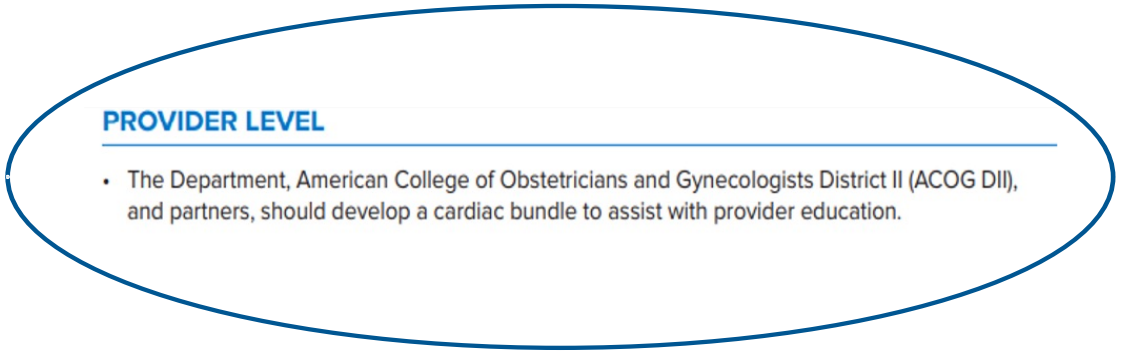
- Mandate Equity Training
- Diversify Workforce
- Quality Improvement
- Expand Care Access
- Support Mental Health
- Promote Feedback & Inclusion

NYSPQC Successes

- **97%** of births in New York State occur in a birthing facility that has participated in a NYSPQC project
- **96%** of birthing facilities in New York State have participated in a NYSPQC project
- **90%** of hospitals reported using quantitative blood loss (QBL) measurement by the end of the NYS Obstetric Hemorrhage Project, a more accurate way to measure blood loss during birth
- **5X** more patients received education on postpartum preeclampsia, from 12.3% to 80.4% by the end of the Maternal Hemorrhage & Hypertension Project

ACOG District II's Safe Motherhood Initiative

At the Recommendation of Maternal Mortality Review Board published a Cardiac Bundle



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.

Webinar: Care of the Pregnant and Postpartum Patient in the Emergency Department

- Highlights opportunity to enhance care in ED to prevent maternal mortality
- Derived from NYS maternal mortality data and recommendations
- Collaboration of ACOG District II's Safe Motherhood Initiative, NYS American College of Emergency Physicians and New York State Department of Health
- **January 23, 2025, 5:00 - 6:00 PM EST**

COLUMBIA | OBSTETRICS AND GYNECOLOGY

NEW YORK STATE | Department of Health Maternal Mortality Review Board

Project Teach:
Leading on Perinatal Mental Health

15% of pregnancy related deaths are caused by mental health conditions

Project Teach allows clinicians, including Obs, in NYS to speak with a reproductive psychiatrist

- Train clinicians in mental health assessment and psychopharmacology treatment
- Clinician-to-clinician psychiatric phone consultation
- Linkages to community-based mental health services (for therapy)

ProjectTEACH
TRAINING AND EDUCATION FOR THE ADVANCEMENT OF CHILDREN'S HEALTH

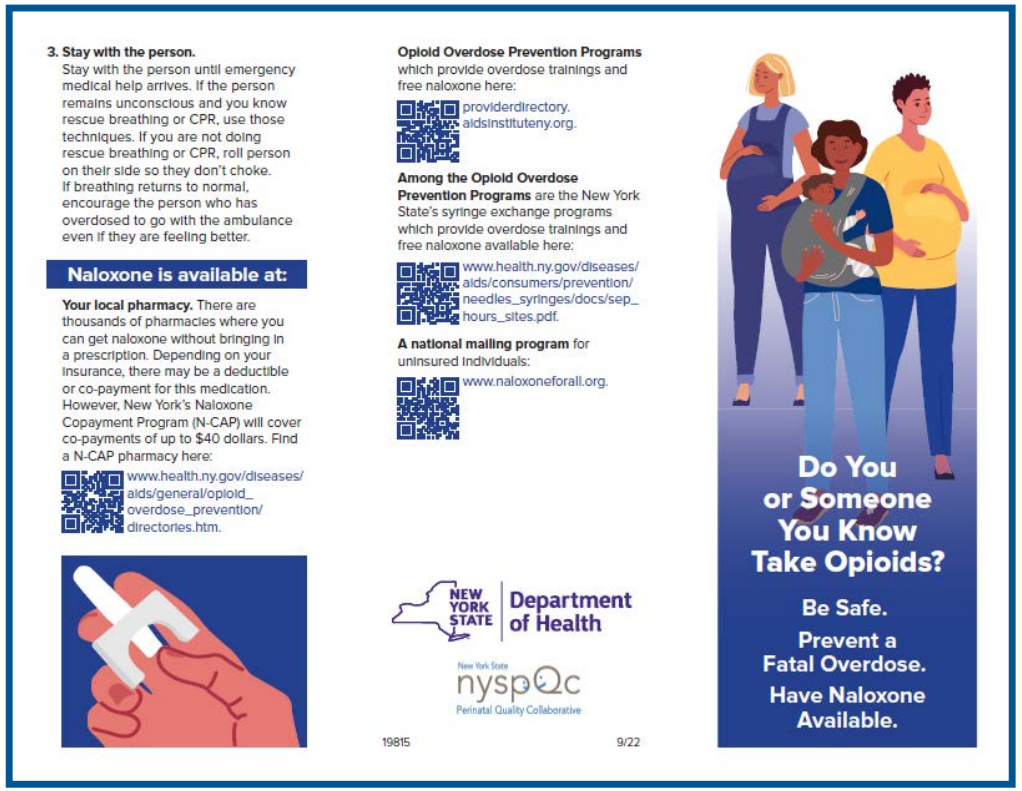
A Project Funded by

COLUMBIA | OBSTETRICS AND GYNECOLOGY

NEW YORK STATE | Office of Mental Health

NEW YORK STATE | Department of Health
Maternal Mortality Review Board

Naloxone Patient & Family Education Brochures



3. Stay with the person.
Stay with the person until emergency medical help arrives. If the person remains unconscious and you know rescue breathing or CPR, use those techniques. If you are not doing rescue breathing or CPR, roll person on their side so they don't choke. If breathing returns to normal, encourage the person who has overdosed to go with the ambulance even if they are feeling better.

Naloxone is available at:

Your local pharmacy. There are thousands of pharmacies where you can get naloxone without bringing in a prescription. Depending on your insurance, there may be a deductible or co-payment for this medication. However, New York's Naloxone Copayment Program (N-CAP) will cover co-payments of up to $40 dollars. Find a N-CAP pharmacy here:

www.health.ny.gov/diseases/aids/general/opioid_overdose_prevention/directories.htm.

Opioid Overdose Prevention Programs which provide overdose trainings and free naloxone here:

providerdirectory.aidsinstituteny.org.

Among the Opioid Overdose Prevention Programs are the New York State's syringe exchange programs which provide overdose trainings and free naloxone available here:

www.health.ny.gov/diseases/aids/consumers/prevention/needles_syringes/docs/sep_hours_sites.pdf.

A national mailing program for uninsured individuals:

www.naloxoneforall.org.

NEW YORK STATE | Department of Health

New York State nyspQc Perinatal Quality Collaborative

19815 9/22

Do You or Someone You Know Take Opioids?

Be Safe.
Prevent a Fatal Overdose.
Have Naloxone Available.

Naloxone Patient Education Brochure

Where can I get naloxone?

Your local pharmacy. There are thousands of pharmacies where you can get naloxone without bringing in a prescription. Depending on your insurance, there may be a deductible or co-payment for this medication. However, New York's Naloxone Copayment Program (N-CAP) will cover co-payments of up to $40 dollars.
Find a N-CAP pharmacy here:

www.health.ny.gov/diseases/aids/general/opioid_overdose_prevention/directories.htm.

Opioid Overdose Prevention Programs which provide overdose trainings and free naloxone here:

providerdirectory.aidsinstituteny.org.

Among the Opioid Overdose Prevention Programs are the New York State's syringe exchange programs which provide overdose trainings and free naloxone available here:

www.health.ny.gov/diseases/aids/consumers/prevention/needles_syringes/docs/sep_hours_sites.pdf.

A national mailing program for uninsured individuals:

www.naloxoneforall.org.

Find support

The person who experienced an overdose is not the only one who faced a traumatic event. Friends and family members often feel judged for not preventing the overdose. It is important for friends and family members to work together to help the overdose survivor and seek support.

The following organizations provide support for families:

OASAS Supporting a Loved One in Recovery:
oasas.ny.gov/recovery/supporting-loved-one-recovery

NYS OASAS Family Support Navigators (FSNs):
for-ny.org/family-support-navigators/

Friends of Recovery New York:
for-ny.org/family-resources/

Nar-Anon Family Groups:
www.nar-anon.org/

NEW YORK STATE | Department of Health

New York State nyspQc Perinatal Quality Collaborative

19828 9/22

Do You Know Someone at Risk for Opioid Overdose?

Get Naloxone.
Save a Life.

Naloxone Family Education Brochure

COLUMBIA | OBSTETRICS AND GYNECOLOGY

NEW YORK STATE | Department of Health
Maternal Mortality Review Board

Maternal Health Research Centers of Excellence (CoE) Sites

RESEARCH CENTERS*

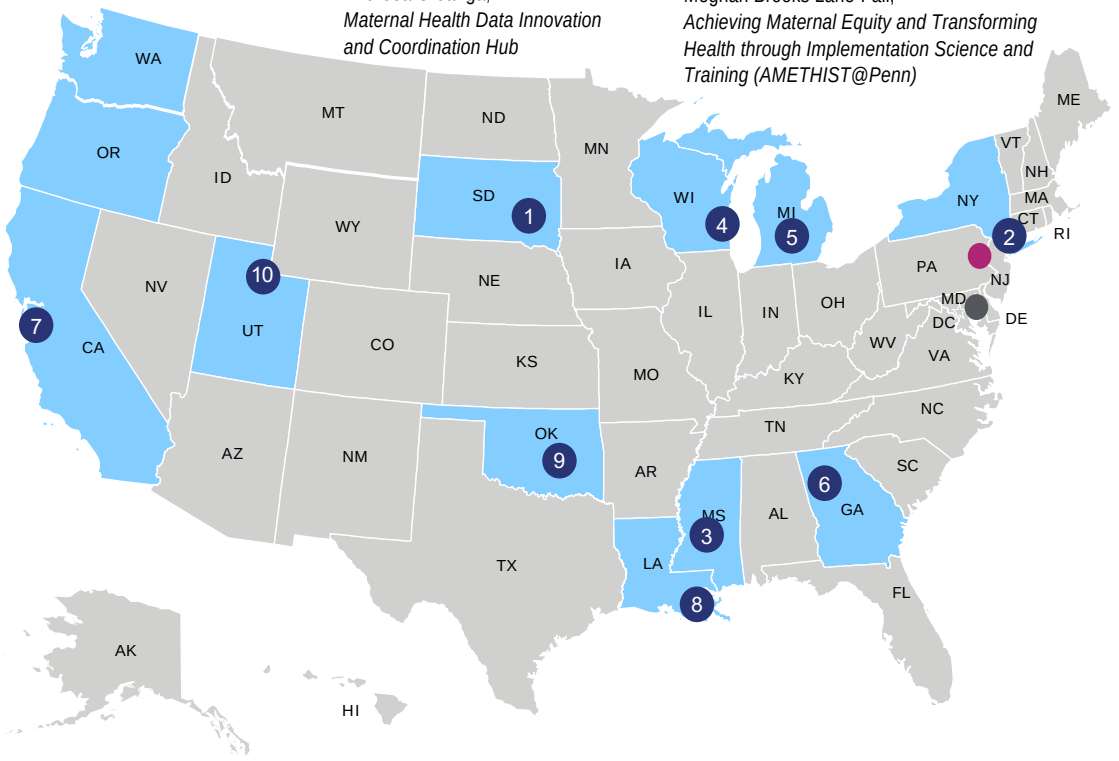
1. Avera McKennan Hospital, Sioux Falls, South Dakota
   Amy J. Elliott, *Maternal American-Indian Rural Community Health (MARCH)*
2. Columbia University, New York City
   Uma Reddy, *NY Community-Hospital-Academic Maternal Health Equity Partnerships (NY-CHAMP)*
3. Jackson State University, Jackson, Mississippi
   Mary D. Shaw, *Delta Mississippi Center of Excellence in Maternal Health*
4. Medical College of Wisconsin, Milwaukee
   Anna Palatnik, *Addressing Key Social-Structural Risk Factors for Racial Disparities in Maternal Morbidity in Southeastern Wisconsin (ASCEND WI)*
5. Michigan State University, East Lansing
   Cristian Ioan Meghea, *Maternal Health Multilevel Intervention/s for Racial Equity (MIRACLE) Center*
6. Morehouse School of Medicine, Atlanta
   Natalie Dolores Hernandez, *Center to Advance Reproductive Justice and Behavioral Health among Black Pregnant/Postpartum Women and Birthing People (CORAL)*
7. Stanford University, Stanford, California
   Yasser Y. El-Sayed, *Stanford PRIHSM: Preventing Inequities in Hemorrhage-related Severe Maternal Morbidity*
8. Tulane University, New Orleans
   Emily Wheeler Harville, *Southern Center for Maternal Health Equity*
9. University of Oklahoma Health Sciences Center, Oklahoma City
   Karina M. Shreffler, *Center for American Indian/Alaska Native Resilience, Culture, and Maternal Health Equity*
10. University of Utah, Salt Lake City
    Torri D. Metz, *ELEVATE Center: Reduction of Maternal Morbidity from Substance Use Disorder in Utah*

DATA INNOVATION & COORDINATION HUB

Johns Hopkins University
Andreea Creanga,
Maternal Health Data Innovation and Coordination Hub

IMPLEMENTATION SCIENCE HUB

University of Pennsylvania
Meghan Brooks Lane-Fall,
Achieving Maternal Equity and Transforming Health through Implementation Science and Training (AMETHIST@Penn)



COLUMBIA | OBSTETRICS AND GYNECOLOGY

NEW YORK STATE | Department of Health
Maternal Mortality Review Board

NEW YORK STATE | Department of Health | Maternal Mortality and Morbidity Advisory Council

Maternal Mortality and Morbidity affects your community -

What can you do to facilitate change?

January 16, 2025

Cheryl Hunter-Grant, MSW
Chair
NYS Maternal Mortality and Morbidity Advisory Council (MMMAC)

Who is the MMMAC?

- The Council is comprised of multidisciplinary experts including community members, midwives, doulas, physicians, and healthcare executives knowledgeable in the fields of maternal mortality, women's health, and public health, and includes members who serve and are representative of the racial, ethnic, and socioeconomic diversity of the birthing people of the state.

Recommendations Reviewed Through Racial Justice Framework

- Feedback from community members highlighted the **impact of racism** on perinatal care
- The Council wants to ensure that recommendations and actions to combat maternal mortality are helping to address the impact of racism, especially on some of the **root causes and systems** contributing to maternal deaths.

Maternal Mortality in Focus

73.6% of pregnancy-related deaths 2018 – 2020 were **preventable**

NEW YORK POST

US pregnancy deaths rising, especially among minorities: CDC

By Associated Press May 8, 2019 | 1:59pm

Soleil Irving "just lights up a room when she smiles," Wanda Irving, her grandmother, says. (Sheila Pree Bright for ProPublica)

LOST MOTHERS

Nothing Protects Black Women From Dying in Pregnancy and Childbirth

Not education. Not income. Not even being an expert on racial disparities in health care.

THE CITY

THURSDAY, DECEMBER 10, 2020 | REPORTING FOR NEW YORKERS

HEALTH

Brooklyn Woman's Death During Childbirth Spurs Renewed Outcry Over Treatment Disparities

BY CLAUDIA IRIZARRY APONTE | JUL 9, 2020, 11:03PM EDT

Op-Ed: 'Time's up' for Black maternal mortality

By Bronx Times Posted on November 24, 2020

Why America's Black Mothers and Babies Are in a Life-or-Death Crisis

The answer to the disparity in death

The Last Person You'd Expect to Die in Childbirth

The U.S. has the worst rate of maternal deaths in the developed world, and 60 percent are preventable. The death of Lauren Bloomstein, a neonatal nurse, in the hospital where she worked illustrates a profound disparity: The health care system focuses on babies but often ignores their mothers.

by Nina Martin, ProPublica, and Renee Montagne, NPR
May 12, 2017

This story was co-published with NPR.

AS A NEONATAL INTENSIVE CARE NURSE, Lauren Bloomstein had been taking care of other people's babies for years.

NEW YORK STATE Department of Health | Maternal Mortality and Morbidity Advisory Council

Racial Discrimination Increases Hospital Costs In the United States

70%

Severe maternal morbidity increases length of stay in the hospital by about 70% compared to those without severe complications

3x

Women with complications have more than 3x the delivery costs than women with no complications

25k

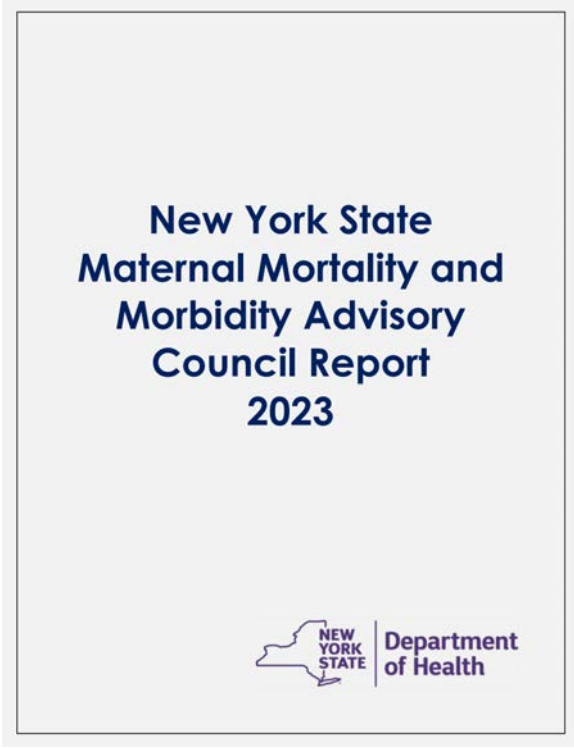
Severe maternal morbidity and mortality escalate cost of care by anywhere from a few hundred dollars up to $25,000/episode

NEW YORK STATE | Department of Health | Maternal Mortality and Morbidity Advisory Council

Source: Maternal Health Trends 2008-2020 (premierinc.com)

Methodology

- Developed using a health equity lens
- Calls on individuals, institutions, organizations, and government bodies to take action to improve maternal health outcomes in New York State
- Organized into three domains:
  - Policy Change
  - Best Practices
  - New or Enhanced Strategies



Maternal Mortality and Morbidity Advisory Council Report, 2023 (ny.gov)

Call to Action: Implementation of Recommendations

Actions are needed by a wide range of partners working together at the system, facility, provider, community, and individual levels.

Each are in a unique position to help improve patients' birthing experiences and maternal outcomes by making impactful change where birthing people live, work, and seek health care

The voices of individuals with lived experience and their support systems are also integral in calling partners to act.

Call to Action to Recognize and Reduce Racism and Discrimination

- All NYS health facilities will **provide annual and ongoing racial equity training for all staff in the agency**.
- Healthcare facilities can **collaborate** with NYSDOH office of Equity and Human Rights, Primary Care, and Health System Management in **developing racial equity training**.
- Birthing facilities can facilitate access to comprehensive culturally aware and linguistically competent, multidisciplinary providers that **support patient-centered care and decision making throughout the birthing experience**.

Cordielle Street
Died 3/3/20

Call to Action to Address the Impact of Social Determinants of Health

- Multiple **partnership efforts** are required to **address inequities** and impact system change in maternal mortality and morbidity.

- State and local agencies can **focus efforts on structural, social determinants of health** (i.e., lack of housing, transportation, affordable healthy foods, and accessible care).

Amber Rose Isaac
Died 4/21/20

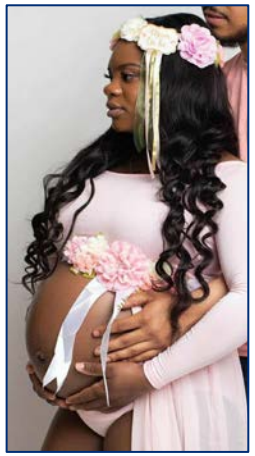
- Facilities can deliver provider trainings that will assist in **identifying the social determinants of health** that impact their patients' pre-existing health status, ability to attend health appointments, access to nutritional foods and ultimately factors that impact compliance to their healthcare regimen.

Call to Action to Support Mental Health

- Providers can **utilize the services** of **Project TEACH**, a resource for education and expert consultation, to guide the optimal management of mental health conditions in pregnant and postpartum patients
- Health Systems can **utilize** available resources such as the **Postpartum Resource Center of New York**, Inc to connect to patients and families experiencing perinatal mood and anxiety disorders with peer support and treatment options
- Facilities can **provide** families and providers **time and space to grieve** following a tragic loss.
- Professional organizations can offer their members education and **“healing circles”** to share experiences and support one another.

Call to Action to Find New Partners and Explore Ways to Drive Action

- Individuals and communities can **expand advocacy efforts** by **creating and leveraging new partnerships**.
- The NYS Legislature can **allocation of funds** for community-based organizations, perinatal home visiting programs, maternal medical homes, and perinatal quality improvement projects.



Sha-Asia Washington
Died 7/3/20

Call to Action to Find New Partners and Explore Ways to Drive Action

- Community-based organizations can encourage pregnant and postpartum individuals to **lend their voices** through testimonials to **affect change** and improve the experience of care for all birthing people, especially Black birthing people who have experienced racism and discrimination in the health care system.

- **Elevate expert witness voices** by inviting them to participate in state and local workgroups, councils, and boards, as well as focus groups and community listening session.

Denise Williams
Died 8/30/21

Christine Fields
Died 11/13/23

Call to Action to Improve Care Coordination and Optimize Postpartum Care

- **Collaboration** of the state, regional and local entities in **providing care coordination supports** to birthing people, especially those experiencing medical or behavioral health conditions.

- Expansion of Medicaid coverage to include one-year postpartum coverage to improve continuity of care for pregnant and postpartum people and their newborns and their family.

NYC HEALTH+ HOSPITALS

Maternal Home

Commissioner's Grand Rounds
January 13, 2025
Wendy Wilcox, MD, MPH, MBA, FACOG

Background

In 2018, NYC Health + Hospitals received funding from City Hall to address the maternal mortality and morbidity crisis. At the time…

- More than 3,000 women experienced a life-threatening event during childbirth, and about 30 women died each year in New York City.
- Black, non-Hispanic women were eight times more likely to die in childbirth than white women in NYC.

Other reasons for forming the Maternal Home

- Lack of outreach to connect new parents to community supports
- Lack of follow-up to ensure patient connects to specialist care
- Lack of social supports for obstetric patients
- Lack of care coordination and follow-up among providers hindered the delivery of appropriate care
- Pregnant patients with chronic conditions are at higher risk for poor pregnancy outcomes and need continuity of care

Maternal Mortality Review Board Recommendations

- The Department should convene a multidisciplinary group of key interested parties to develop standard guidance on implementation of a maternity medical home model that prioritizes people with chronic conditions. In addition, New York State should provide funding to support a pilot project of the maternity medical home model. (2018, 2020)

- Hospital systems and obstetrical providers 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 people with chronic conditions (including those with mental health conditions or substance use disorders), and those with difficult access (e.g., rural areas) to follow-up care and community resources. (2018, 2019)

The Maternal Home Model

- Population-focused for maternity care that embodies the principles of the Primary Care Medical Home (PCMH).
- Patient-centered model, proactively supporting patients throughout their pregnancies and postpartum period and coordinating multiple services necessary to provide comprehensive care.
- Aligns with the Triple Aim to
  - Improve the patient experience of care (including quality and satisfaction)
  - Improve the health of populations
  - Reduce the per capita cost of healthcare.

What is unique about the NYC H+H Maternal Home?

- A hospital system-based, patient-centered program which is integrated into the maternal care delivery model at all **11 NYC Health + Hospitals**
- Provides **comprehensive wrap-around support** to pregnant people with identified needs in the areas of: social determinants of health, behavioral health or complex clinical needs.
- ALL patients qualify for services and support when they present for care. **There are no insurance restrictions or eligibility requirements**.
- **Licensed social workers and care coordinators** (non-licensed) are the program resources and work alongside clinical care teams to provide supplemental care across the System

NYC HEALTH+ HOSPITALS

Entry into MH at any point in pregnancy

Motivational interviewing and assigning a risk tier

Care coordination through MH coordinator or social worker for all needed services

Standardized care pathways that target common risk factors for poor birth outcomes

Patient-centered care and shared decision making (such as developing a birth plan)

NYC H+H Maternal Home

Tier I Services

Prenatal

- Screen for trauma, domestic violence, mental health and substance abuse, and comorbidities
- Assessment for socio-economic needs
- Referrals to internal partners and CBOs based on level of need and risk tier

Birth Planning

- Review birthing options and develop birth plan
- Resources (childcare supplies) distributed to patient
- Additional needs reviewed
- Pediatric clinic informed about patient

Postpartum

- Tracking of patients to ensure successful birth
- Postpartum assessment conducted within 2-4 weeks after birth
- Verification of scheduled newborn appointment
- Referrals to primary care for patients with comorbidities
- Warm handoff to pediatric clinic

Risk Tier Stratification

Tier 1: Typical Risk
Universal Services

Criteria:
- All OB Patients who meet with MMH Care Coordinators and Supervisors receive these services
- MMH Assessment completed and no complex needs identified
- Patient has an interest in basic educational material and/or other resources; patient is able to independently connect with resources provided
- Low-Risk responses to screening tools:
  - PHQ9: 0-4
  - CAGE-AID: 0-1
  - Prenatal ACEs screening (<4 and/or patient prefers not to discuss score)
  - No IPV/Family Violence indication
  - Stress: ≤ 6

Services:
- Screening for depression, trauma, substance use, IPV/Family Violence (PHQ9, ACES, CAGE-AID, AUDIT, DAST, IPV/Family Violence)
- Health education and distribution of educational materials and other resources
- Development of Birth Plan after 27 weeks
- MMH Postpartum Assessment and Screenings
- If patients needs increase or change during pregnancy, they may self-refer to MMH services, or may be referred by ambulatory team or other care provider (e.g. Community Care Team)

Tier 2: Elevated Risk
Non-Intensive Services

Criteria:
- MMH Assessment indicates needs requiring additional, non-urgent follow-up (Financial/Housing, Medical, Pregnancy and Social Support, Nutrition, Mental Health, Substance Use, IPV/Family Violence, Legal needs)
- Screenings yield mid-range to high-risk scores in one or more area:
  - PHQ9:>4
  - CAGE-AID: ≥2
  - DAST-10: >3
  - AUDIT-10: ≥ 8
  - ACEs: 4-10
  - GAD: 10-15
  - Stress: ≥7
  - Affirmative response to any IPV/Family Violence Questions
- Patients who have complex and compound referral needs (referrals that may involve coordination with internal and external service providers)
- Patients with a history of perinatal medical complications and/or perinatal mood and anxiety disorder
- Patient interested in continuity of care support and advocacy

Services: *All Tier 1 Services and…*
- Development of Care Plan/Patient Goals
- PHQ9, IPV/Family Violence, CAGE-AID each trimester
- Complex referrals and linkage monitoring for non-urgent housing, nutrition, mental health, IPV/DV, substance use, legal and social needs
- Monitoring and support for pregnancy-related medical conditions
- Contact occurs once per trimester, including postpartum, and as needed to address service plan needs

Tier 3: High Risk
Comprehensive Services

Criteria:
- Patients who have complex, compound and time-sensitive referral needs
- Screening tools indicate high risk levels in one or more area:
  - PHQ9: 10-27 and/or active or passive suicidal ideation indicated
  - CAGE-AID: ≥2
  - DAST: >3
  - AUDIT: ≥ 8
  - GAD: 15-21
  - ACES: 4-10
  - Stress: ≥7
  - Affirmative response to multiple IPV/Family Violence questions and/or increased frequency/severity of IPV/Family Violence incidents

Services: *All Tier 1 and 2 Services and…*
- Contact occurs at least once a month and as needed to address urgent service plan needs
- Coordination of care across providers (Medical, BH, Community Care) and warm hand-off to 3-2-1 Impact and other support teams

Highlights

January 2018

NYC Health + Hospitals is granted funding to launch a comprehensive plan to address maternal morbidity and mortality by City Hall. The **Maternal Home (MH)** is launched, along with a larger programmatic focus.

2018-2019

Planning for MH begins

- Maternal care coordinators and social workers are hired for the 11 H+H facilities
- Multidisciplinary steering committee is created and tools and workflows are developed

September 2019

Pilot site **NYC Health + Hospitals/Kings County** launches the maternal Home. An initial survey (n=24) showed that 94% of patients were satisfied with the MH and would want to be connected again in a subsequent pregnancy. .

April-August 2020

COVID Peak

- MH team provides follow-up care to pregnant and postpartum patients who test positive for COVID-19
- 134 patients receive care coordination and support.

July 2023

MetroPlus
Partnership with High Risk team to enhance MH program experience for MetroPlus patients

2025

Independent Analysis
Funding secured and two independent analyses commence:
1) mixed methods analysis to assess program implementation and;
2) Medicaid analysis

NYC HEALTH+ HOSPITALS

Program data CY'23

Age distribution	Patients (n)	Patients (%)
<20-24	527	26%
25-34	998	49%
35+	511	25%

Race/Ethnicity	Patients (n)	Patients (%)
Latina	863	42%
AA/Black	730	36%
Unknown	181	9%
Asian	135	7%
White	108	5%

Top HRSN referrals	Patients (n)	Patients (%)
WIC	699	31%
Mental Health	474	23%
Birthing / parent education	306	15%
SNAP	277	15%
Housing	253	12%
Food pantries	241	12%
Legal	162	8%

Top healthcare referrals	Patients (n)	Patients (%)
Lactation support	597	29%
Doulas (in community)	528	26%
Nurse family partnership**	290	14%
Healthy Families	284	14%
Healthy Steps / IMPACT	210	10%

Cumulative Program data 2021-2024

	2021-2024
Unique clients enrolled	8,474
Total births	59,588
% of birth population	14%
Referrals made to CBO's	7,333
Referrals made to doula organizations	2,376
Referrals made to Nurse Family Partnership	1.024
Referrals made to Behavioral Health	1,373
All referrals	27,049

Lessons Learned

- Embedding the Maternal Home within the clinical space allowed for ease of face to face interactions with patients, ease of use for providers, enhanced communication among the care team and enabling trust with providers.
- The clinical team was already embedded in the site. The MH extends the reach and breadth of the clinical team.
- The Maternal Home staff help to facilitate referrals to in-house and community resources and build up knowledge of what is available in the community. They share resources across sites!
- The MH team fosters communication among disciplines throughout the prenatal and postpartum period, and provide a warm handoff to Pediatrics generally after the postpartum visit.

NEW Cardio-Obstetric Program Launches at NYC Health + Hospitals/Kings County

NYC HEALTH+ HOSPITALS

FACILITATED PANEL DISCUSSION

Email us your questions at
GrandRounds@health.ny.gov

NEW YORK STATE | Department of Health

QUESTION ONE:

Through your work with the Maternal Mortality Review Board and your role in managing high-risk pregnancies, can you share one significant success or ‘win’ that has positively impacted maternal health outcomes?

NEW YORK STATE | Department of Health

QUESTION TWO:

How do we ensure that community engagement is effectively integrated into maternal health programs?

NEW YORK STATE | Department of Health

QUESTION THREE:

What are challenges to implementing systemic changes to reduce maternal mortality and morbidity?

NEW YORK STATE | Department of Health

Q & A

EMAIL US YOUR QUESTION:
GRANDROUNDS@HEALTH.NY.GOV

NEW YORK STATE | Department of Health

THANK YOU FOR TUNING IN!

To Earn Continuing Medical Education (CME) Credits:

Scan the QR Code with your smartphone to complete a post-webinar test.

Please use the *same email address* you registered with when completing the post-webinar test!

This webinar will remain open for the next 30 minutes to allow you time to access the post-webinar test.

NEW YORK STATE | Department of Health