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PROTECTING HEALTH, IMPROVING LIVES

Illinois Maternal Morbidity & Mortality Report

April 2021 Release

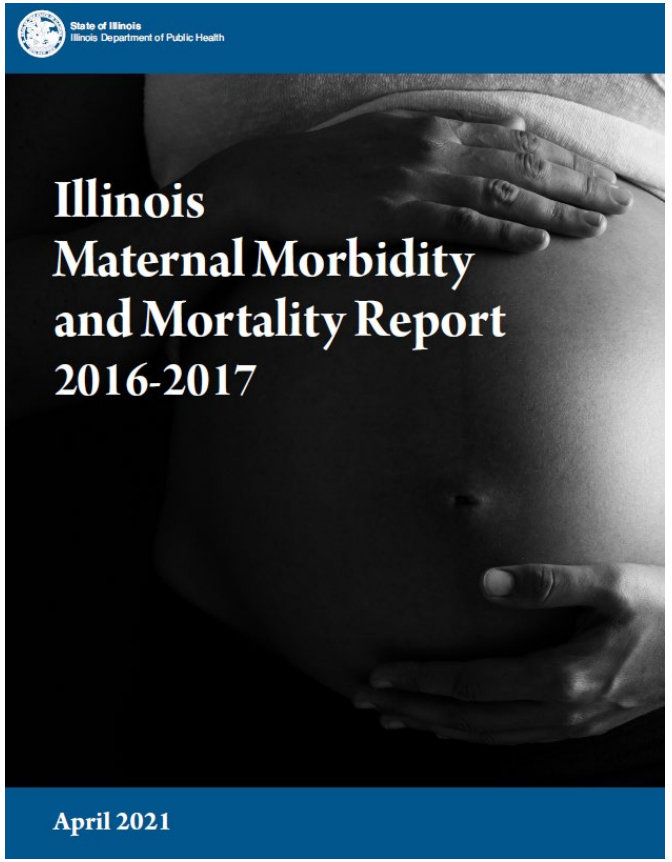
IDPH Office of Women's Health and Family Services

ILPQC Face-to-Face Obstetric Meeting

May 26, 2021

Report Overview

- In April 2021, IDPH published the second "Illinois Maternal Morbidity and Mortality Report"
- Purpose of Report
  - Deepen analysis of the factors contributing to maternal mortality in Illinois
  - Issue updated data-driven recommendations to improve maternal health
  - Highlight accomplishments and progress since the last report



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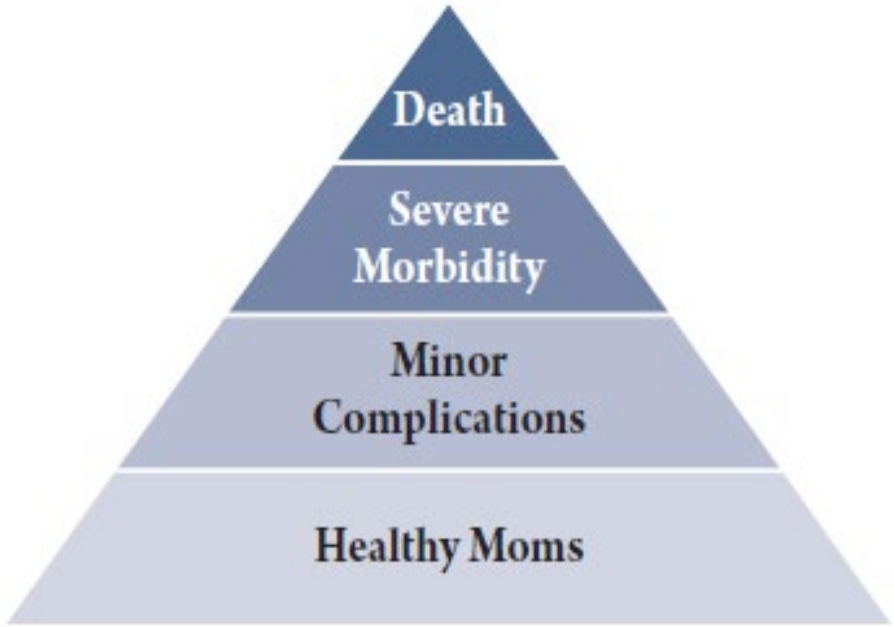
Maternal Mortality: The Tip of the Iceberg

- During 2016-2017, 175 Illinois women died while pregnant or within one year of pregnancy
- Death is only the most severe outcome along a continuum of morbidities and pregnancy complications
- Each maternal death is a sentinel event that highlights critical issues in women's health and healthcare



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Important Definitions

- **Pregnancy-Associated Deaths**: death while pregnant or within one year of pregnancy from ANY cause

- **Pregnancy-Related Deaths**: death while pregnant or within one year of pregnancy from a cause related to a pregnancy
  - Pregnancy complication
  - Chain of events initiated by pregnancy
  - Aggravation of underlying condition by physiologic effects of pregnancy

Illinois' Maternal Mortality Review Committees

- State maternal mortality review committees (MMRCs) are a best practice recommended by the CDC

- **Maternal Mortality Review Committee (MMRC)**
  - Established in 2000
  - Reviews deaths suspected to be medically related to pregnancy
- **Maternal Mortality Review Committee for Violent Deaths (MMRC-V)**
  - Established in 2015
  - Reviews deaths resulting from homicide, suicide, or drug overdose

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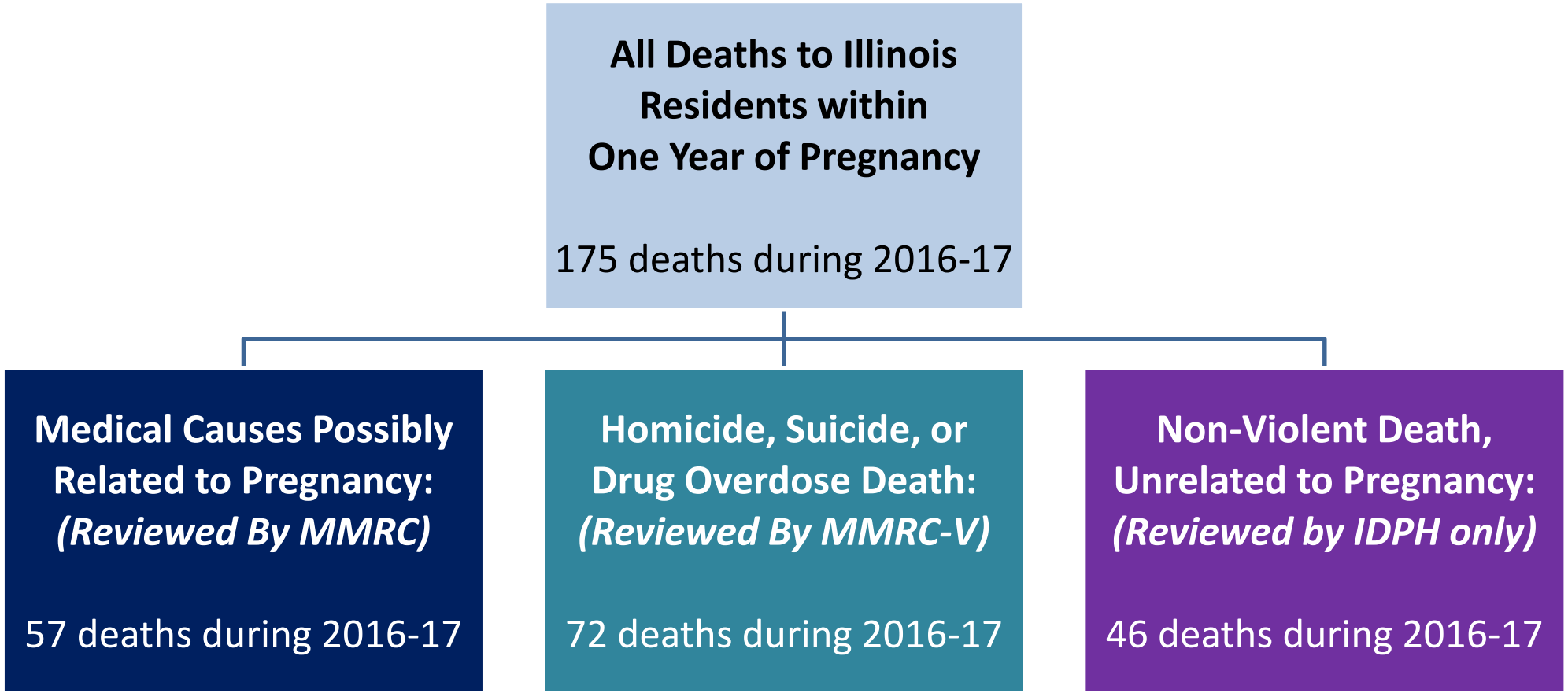
Key Discussion Questions for the MMRCs

1. What was the **cause of death**?
2. Was the death **pregnancy-related**?
3. Was the death **preventable**?
4. What **critical factors** contributed to this death?
5. What are **recommendations** to prevent future deaths?

Maternal Mortality Review in Illinois



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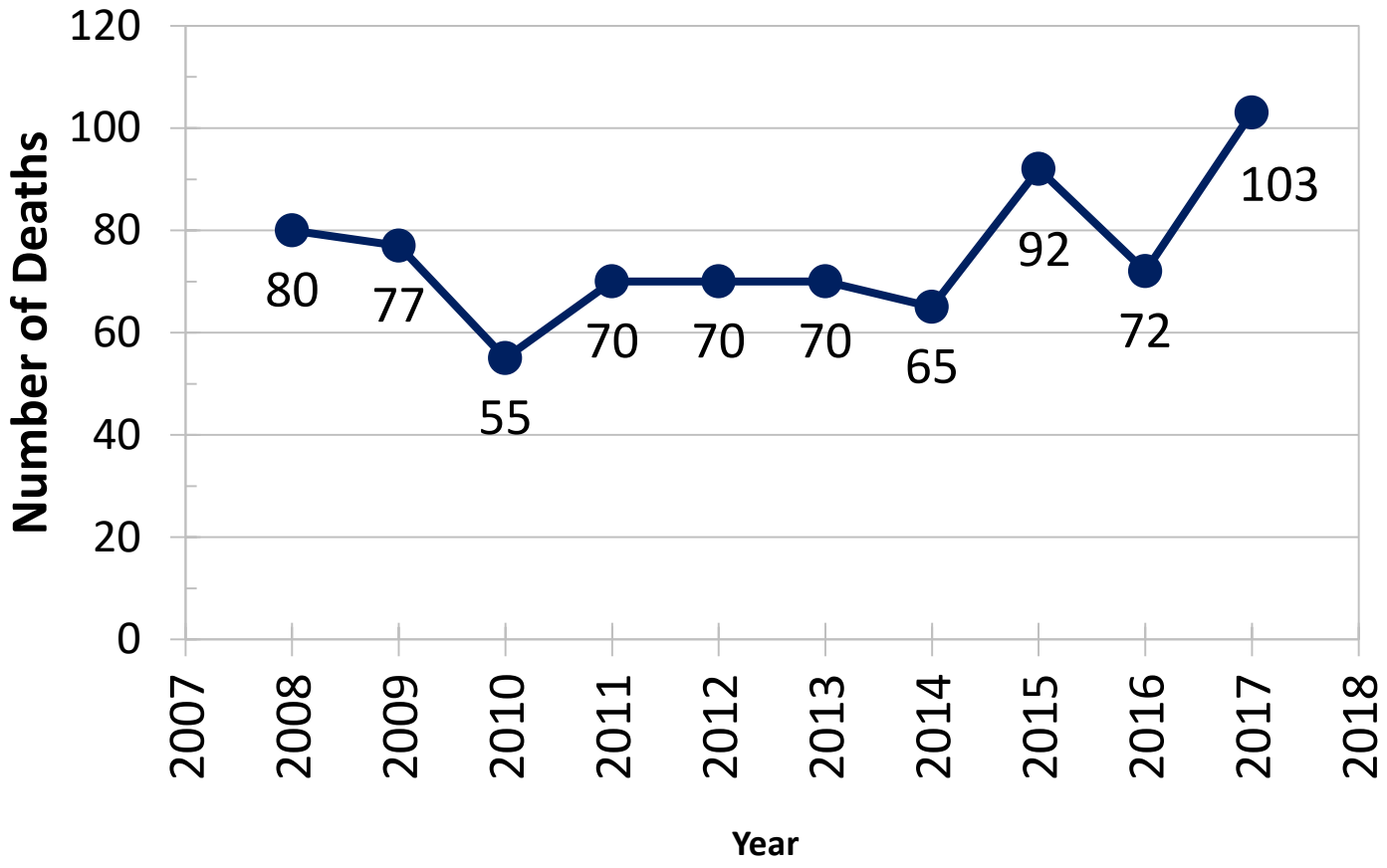
Trend in Pregnancy-Associated Mortality



- Illinois averaged 75 pregnancy-associated deaths each year during 2008-2017
- The highest number of deaths occurred during 2017

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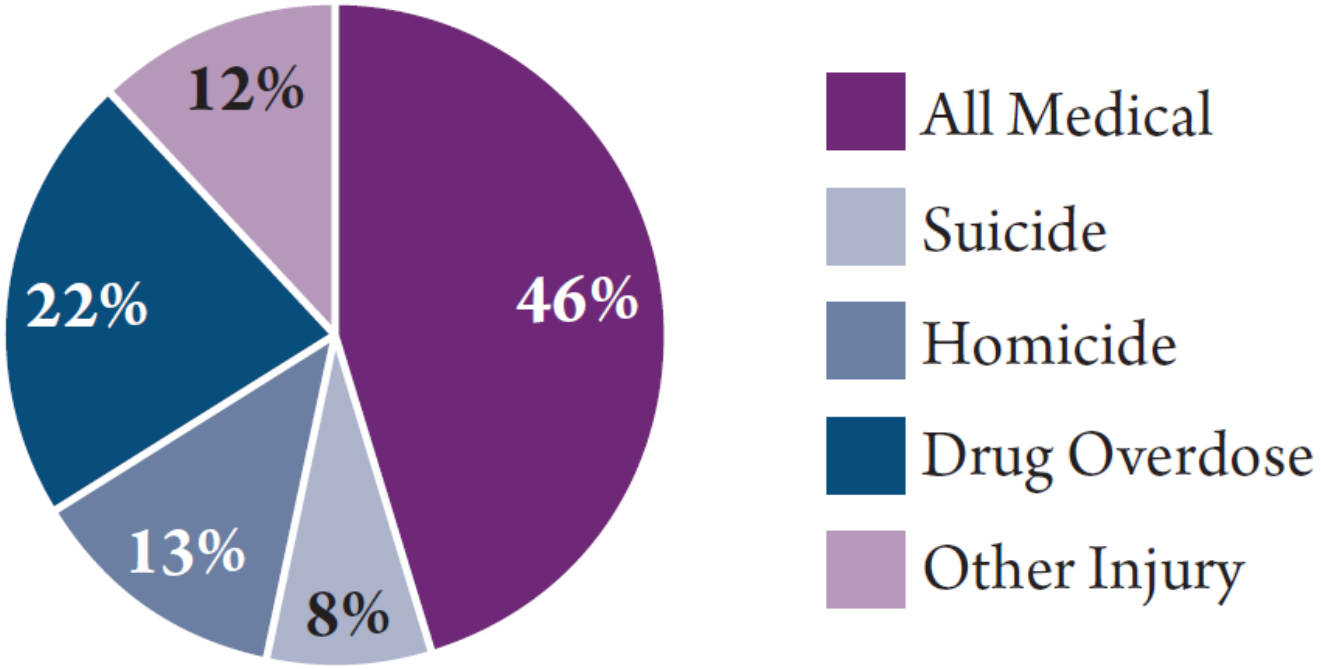
Underlying Cause of Death for Pregnancy-Associated Deaths



- **Medical causes** made up 46% of deaths
- **Violent causes combined** made up 43% of deaths
- **Other injuries** (mostly motor vehicle accidents) made up 12% of deaths

Data Sources: IDPH Death Certificate Data, 2016-2017

Due to rounding, percentages do not add up to 100%

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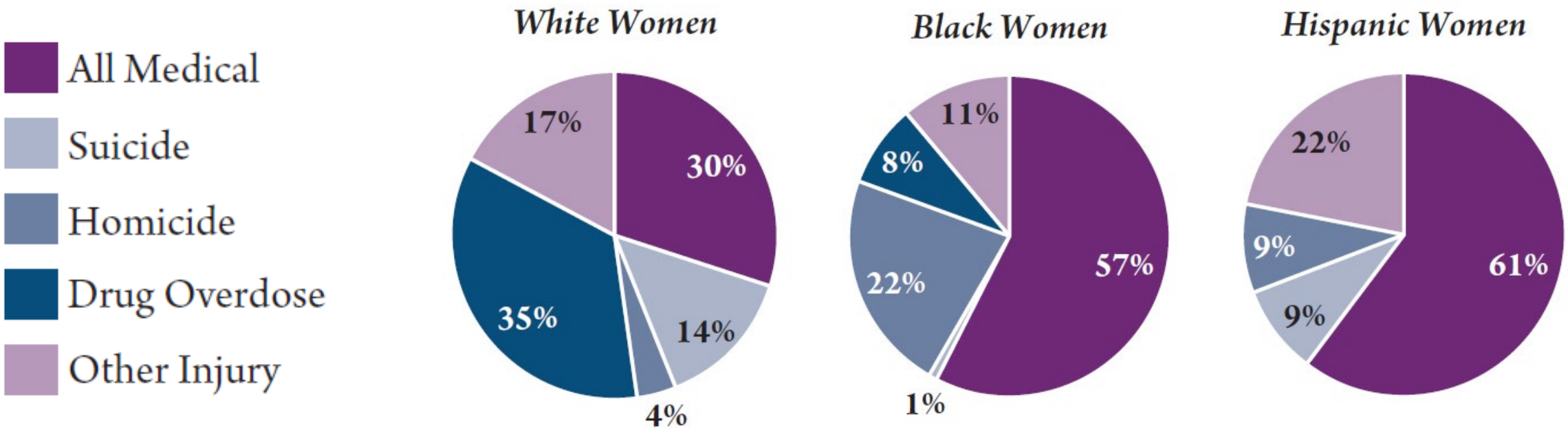
Underlying Cause of Death for Pregnancy-Associated Deaths



The underlying causes of pregnancy-associated mortality were different across racial groups

Data Sources: IDPH Death Certificate Data, 2016-2017

Due to rounding, percentages do not add up to 100%

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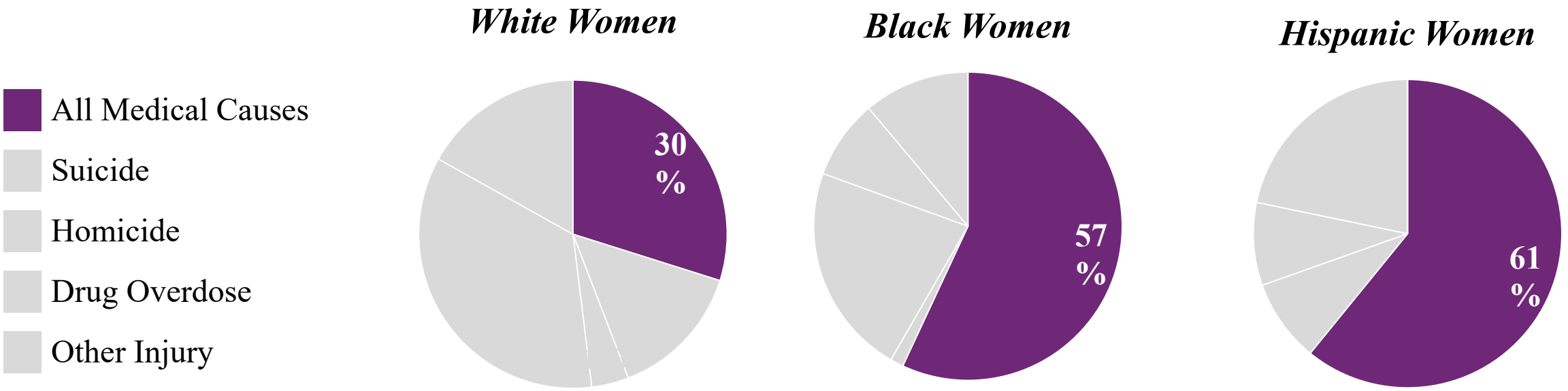
Pregnancy-Associated Deaths Due to Medical Causes



Medical causes made up a larger proportion of deaths for Black and Hispanic women than for White women.

Data Sources: IDPH Death Certificate Data, 2016-2017

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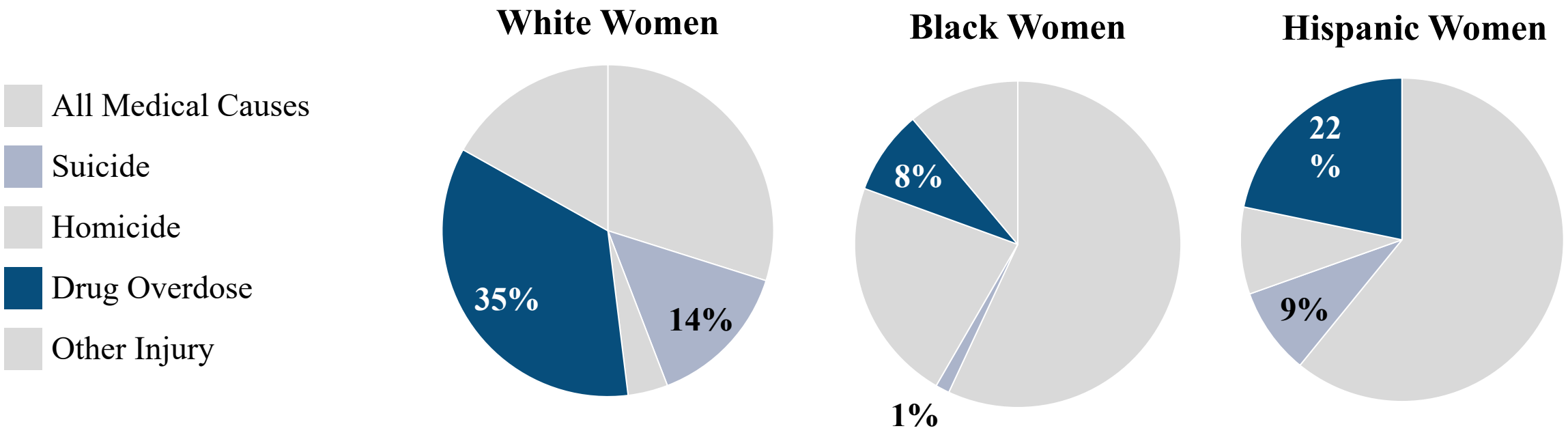
Pregnancy-Associated Deaths Due to Drug Overdose & Suicide



Drug overdose and suicide combined accounted for about half of pregnancy-associated deaths among White women, but made up a lower proportion of deaths for Black or Hispanic women

Data Sources: IDPH Death Certificate Data, 2016-2017

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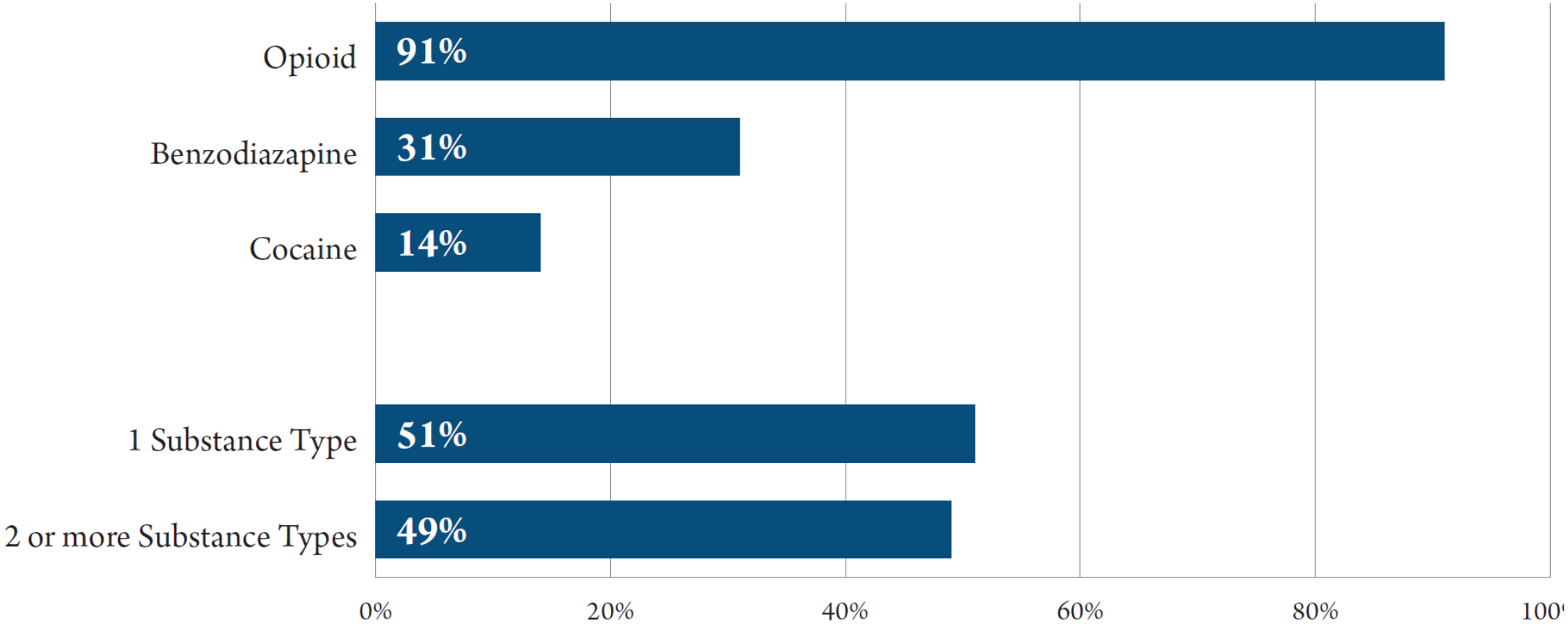
Types of Substances Involved in Drug Overdose Pregnancy-Associated Deaths



Data Sources: IDPH MMRC-V Data, 2016-2017

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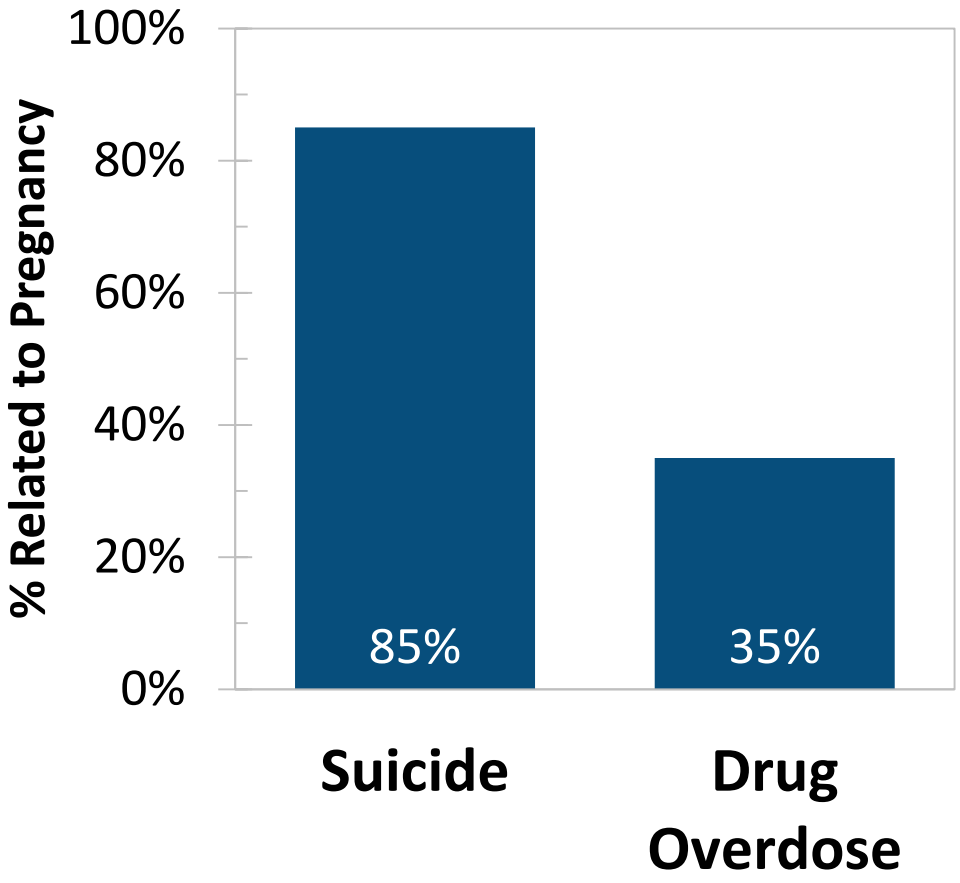
Suicide and Drug Overdose Deaths: Relationship to Pregnancy



- Most pregnancy-associated suicides were related to pregnancy
- About one-third of pregnancy-associated drug overdose deaths were related to pregnancy
- Nearly all these deaths were potentially preventable at some level

Data Sources: IDPH MMRC-V Data, 2016-2017

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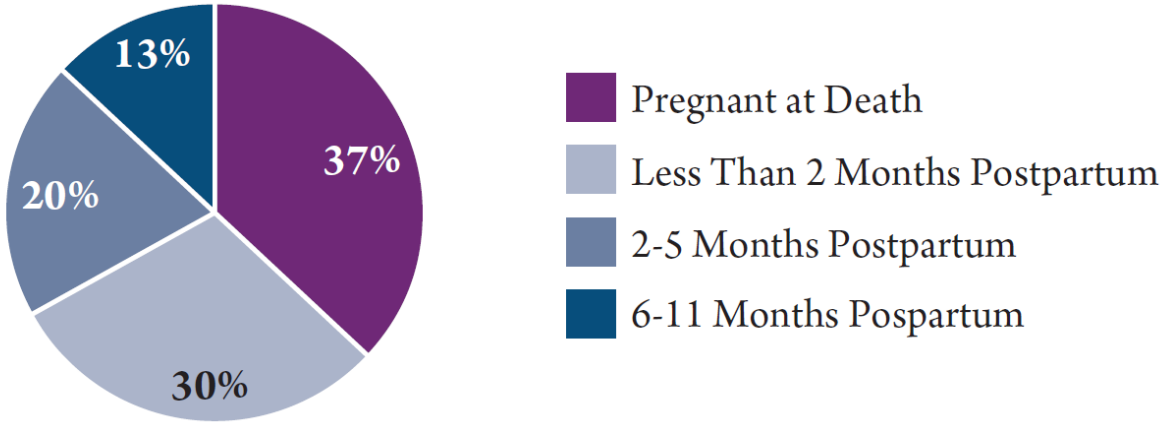
Key Findings for Pregnancy-Related Deaths

- 60 deaths were related to pregnancy in 2016-2017
  - 34% of all pregnancy-associated deaths
- 83% of pregnancy-related deaths were preventable
- About 1 in 3 pregnancy-related deaths occurred in each of the following time periods:
  - During pregnancy
  - Less than 2 months postpartum
  - 2 or more months postpartum



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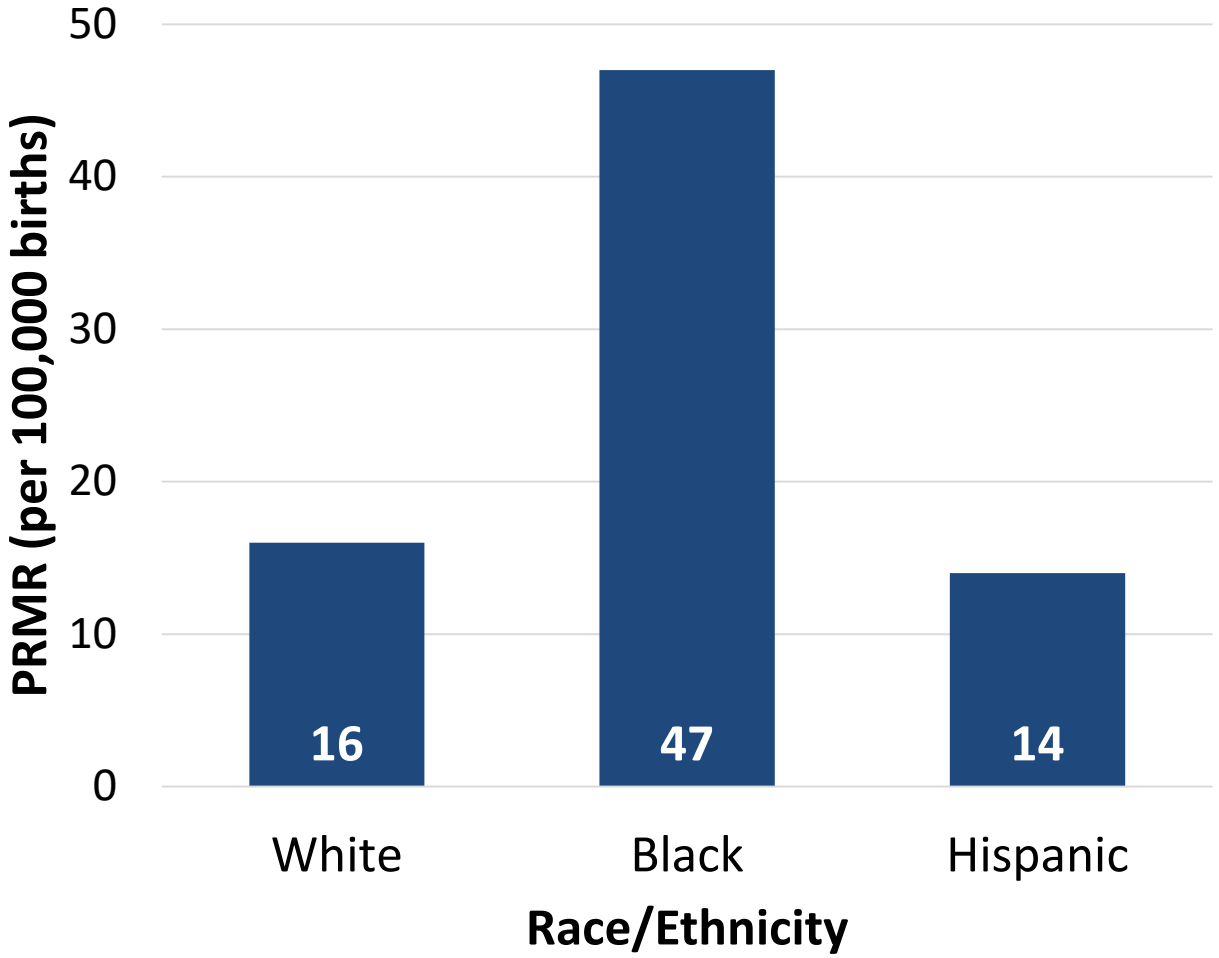
Pregnancy-Related Mortality Ratio by Race/Ethnicity



- Black women were nearly **three times** as likely as White women to die from a pregnancy-related cause
  - In the first report, the Black-White disparity in pregnancy-related mortality was wider
  - The narrowing of the disparity is due to worsening mortality among white women, not improvements for black women

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Top Four Underlying Causes of Pregnancy-Related Deaths

Cause of Death Category	# Pregnancy-Related Deaths	% Pregnancy-Related Deaths
Mental Health Conditions (including substance use disorder)	24	40%
Pre-existing Chronic Medical Condition	5	8%
Hemorrhage	5	8%
Hypertensive Disorders of Pregnancy	5	8%
All Other Causes Combined	21	35%

Due to rounding, percentages do not add up to 100%

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Underlying Causes of Pregnancy-Related Deaths Varies by Race/Ethnicity

- Black women were more likely to die from a pregnancy-related **medical condition** than White women
  - Medical conditions include such conditions as preexisting chronic disease, hemorrhage and hypertension
- White women were more likely to die from a pregnancy-related **mental health condition** than from a medical condition
  - This includes suicides and drug overdoses that were determined to be pregnancy-related

Social Determinants of Health in Pregnancy-Related Deaths

- Of women who died from pregnancy-related causes:
  - 33% experienced **traumatic stress**
  - 76% experienced **financial stress**

- High prevalence of these stressors highlights the importance of:
  - Evaluating and addressing women's trauma history
  - Improving social services for all, but particularly for women with financial stressors

GABRIELLE'S STORY

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Process for Creating Recommendations

- For every preventable maternal death that was reviewed, the MMRCs identified contributing factors to that death
- Recommendations were developed to address the contributing factors identified in each case
- IDPH and the two MMRCs then worked to refine and prioritize the recommendation list based on feasibility and impact
- The final recommendation list was unanimously passed by the MMRC and MMRC-V in December 2020

Recommendation Audience

- Recommendations were developed to target six audiences
  - Hospitals
  - Health care providers
  - Health insurance plans *(including Medicaid)*
  - State of Illinois and Partners
  - Community-Based Organizations
  - Women and their families/friends
- The report shows how these groups have a shared role in the promotion of women's health and the prevention of maternal mortality

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Recommendations for Hospitals
(related to Birth Equity)

1. Quality improvement initiatives to ensure evidence-based practices
2. **Birth equity quality improvement initiative; training on racism, bias, and trauma-informed care**
3. Policy to ensure consult with OB provider prior to discharge of pregnant or postpartum women
4. Care coordination after delivery and pre-discharge scheduling of postpartum visit
5. Resuscitation of pregnant women
6. Assessment and treatment of substance use disorder
7. **Psychosocial assessment and social work services**
8. Provider education on postpartum warning signs
9. **Patient education on postpartum warning signs**

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Recommendations for Health Care Providers

- Many recommendations for health care providers are parallel to the topics covered in the hospital recommendations

- Unique topics for provider recommendations:
  - Screen all women of reproductive age for intimate partner violence
  - Contraceptive counseling and access

Summary

- Illinois has wide, persistent racial disparities in maternal mortality; we need to focus on health equity and improving outcomes for Black women.
- Mental health conditions (including substance use disorder) were the leading cause of pregnancy-related death in 2016-2017.
- Most pregnancy-related deaths are potentially preventable at many levels; we all have a role to play in improving maternal health.

COMMENTS
&
QUESTIONS?

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