Preventing Maternal Deaths: Supporting Maternal Mortality Reviews

CDC Notice of Funding Opportunity

Bureau of Women's and Children's Health

ARIZONA DEPARTMENT OF HEALTH SERVICES
Health and Wellness for all Arizonans

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Presentation Objectives

1. Provide an overview of the maternal morbidity continuum
2. Discuss the Preventing Maternal Deaths: Supporting Maternal Mortality Reviews Notification of Funding Opportunity
3. Gather support for future grant activities

Maternal Mortality in Arizona Overview

- Death of a women during pregnancy, at delivery, or up to year after delivery.
- Around 30-50 cases a year in Arizona.
- SB 1121 passed in April 2011 creates a Maternal Mortality Review Committee (MMRC) as an amendment of the Child Fatality Review Statue.

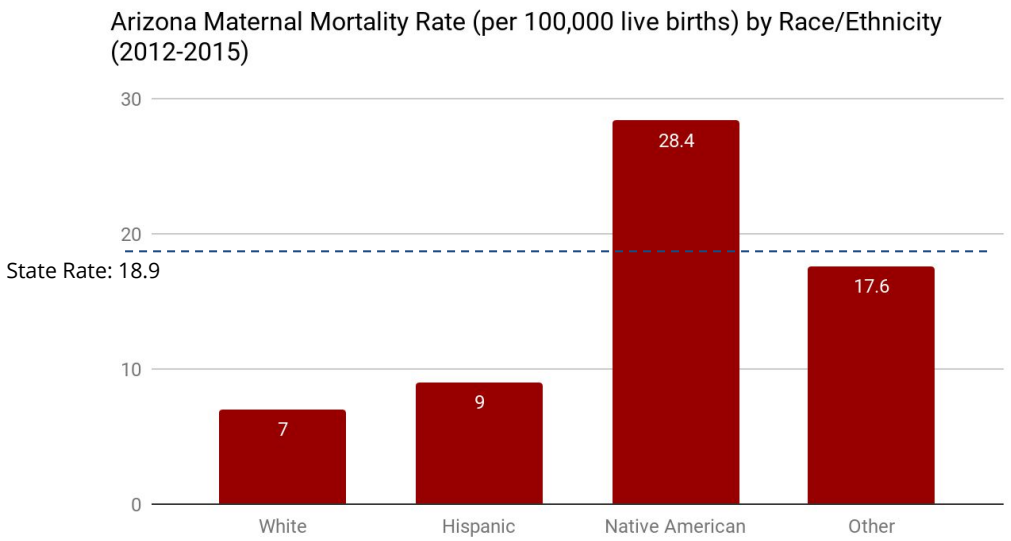
Maternal Mortality in Arizona Overview

- MMRC is a multidisciplinary team composed of physicians, public health professionals and community organizations with the purpose of reviewing all maternal deaths in Arizona and create actionable recommendations for prevention.

- MMRC meets monthly and reviews maternal deaths cases.

- The Maternal Mortality Program do not currently have designated state or federal funding.

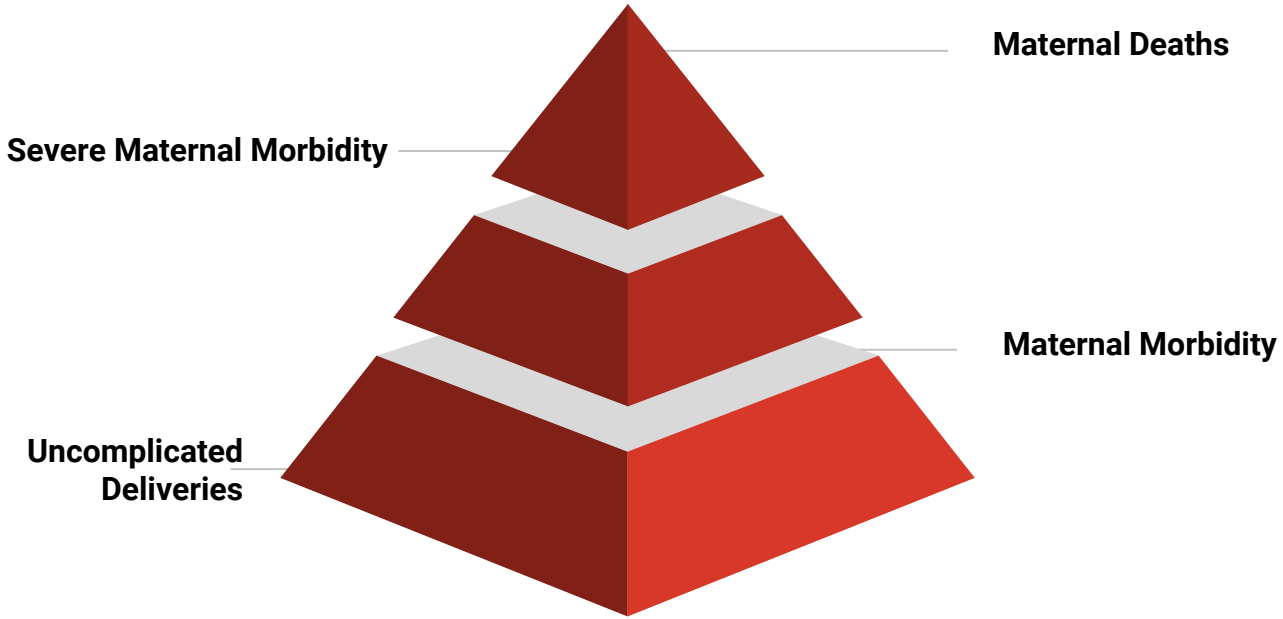
Maternal Mortality in Arizona Overview



- Disproportionate burden of maternal mortality for communities of color.
- **89%** of maternal deaths were deemed preventable.

Spectrum of Maternal Morbidity

Severe Maternal Morbidity (SMM) results from unexpected outcomes of labor and delivery such as hemorrhage, organ failure and stroke that lead to significant short- or long-term consequences to a woman's health.



New York City Department of Health and Mental Hygiene (2016). Severe Maternal Morbidity in New York City, 2008–2012. New York, NY.

SMM in Arizona

More than 1,000 cases every year, 35 for each maternal death in Arizona

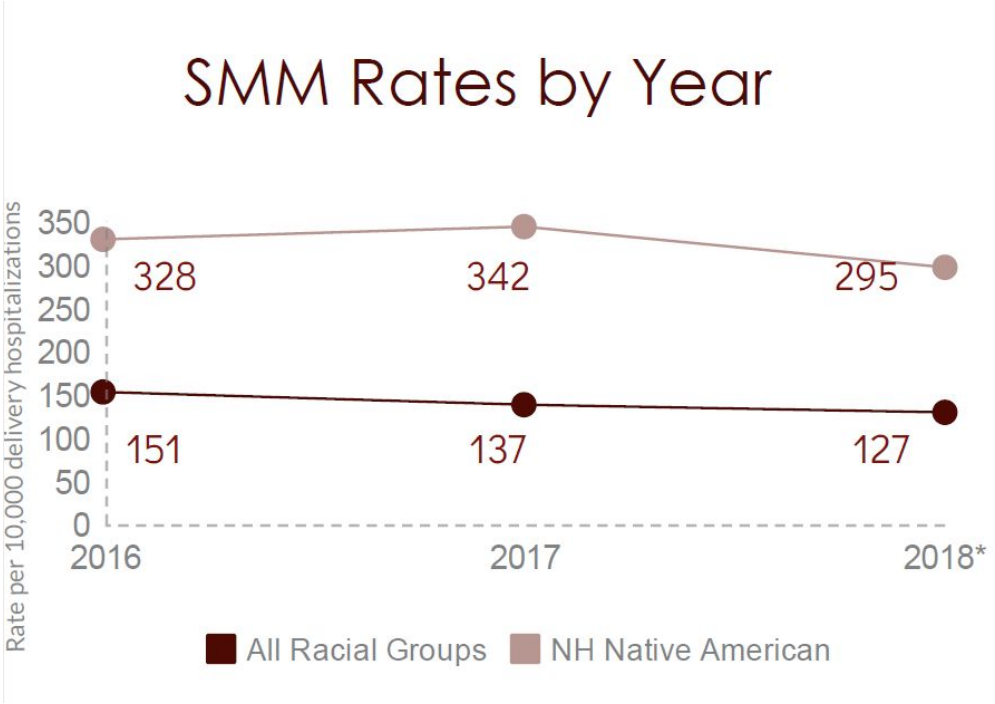
Clear disparities among racial/ethnic groups

- NH Native American women have 3x a larger rate for overall SMM

Combined Arizona SMM Rate 2016-2018Q2

- SMM overall 138.28 (NH Native American 321.5)

The most common indicator for morbidity are blood transfusions followed by disseminated intravascular coagulation and sepsis.



Maternal Mortality in Arizona Overview

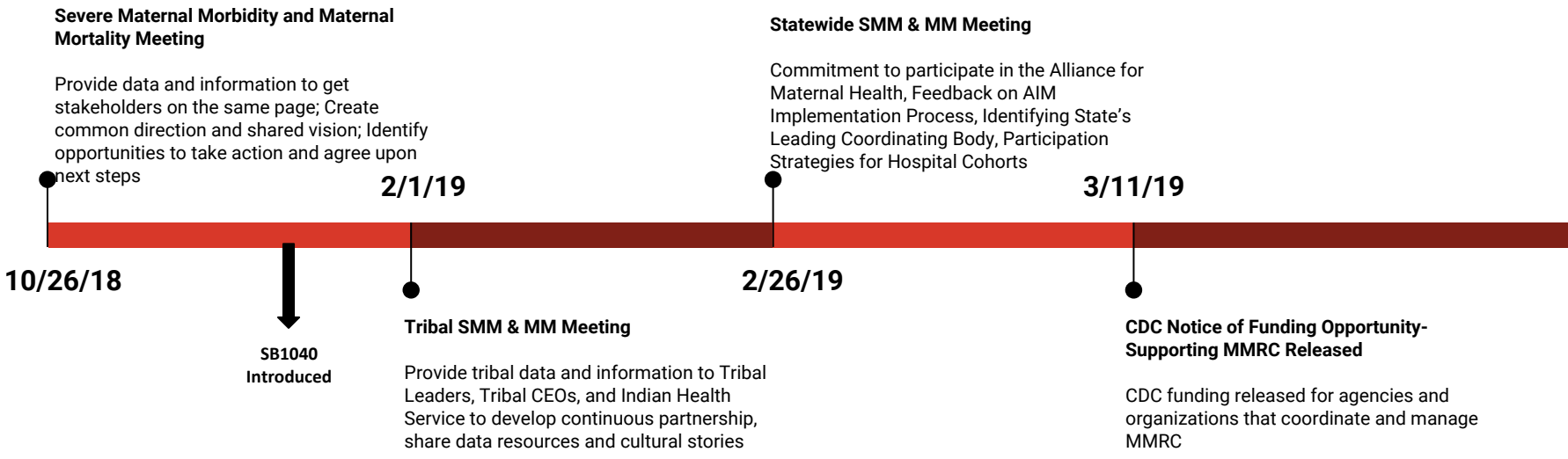
- National and Statewide attention to maternal mortality and morbidity
  - Preventing Maternal Deaths Act of 2018- The bill is intended to establish and support existing maternal mortality review committees (MMRCs) in states and tribal nations across the country through federal funding and reporting of standardized data.

  - Arizona SB1040- “The advisory committee on maternal fatalities and morbidity is established to recommend improvements to information collection concerning the incidence and causes of maternal fatalities and severe maternal morbidity. The director of the department of health services shall 8 appoint the members of the advisory committee.”

    “On or before December 31, 2020, the department of health services shall submit a report to the governor, the speaker of the house of representatives and the president of the senate, and shall provide a copy to the secretary of state, on the incidence and causes of maternal fatalities and morbidity that includes all readily available data through the end of 2019.”

*SB1040 is proposed and going through legislative process

Severe Maternal Morbidity and Maternal Mortality Initiatives



Grant is due by May 8, 2019

Preventing Maternal Deaths: Supporting Maternal Mortality Reviews

- To identify and characterize maternal deaths with the goal of identifying prevention opportunities
- Aim to better understand and prevent pregnancy-related deaths by supporting MMRC to gather detailed, complete data on causes and circumstances surrounding maternal deaths to develop recommendation for prevention
- Project Outcomes
  - Timely, accurate, and standardize information available
  - Increased awareness of the existence and recommendations of MMRC
  - Implementation of data driven recommendations
  - Widespread adoption of patient safety bundles and/or policies
  - Reduction in maternal complication of pregnancy

Gathering Feedback - Tribal Input

THANK YOU

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Grant Title: Preventing Maternal Deaths: Supporting Maternal Mortality Review Committees (MMRC), CDC-RFA-DP19-1908

This is a competitive grant application and five year project period. The grant due date is May, 8, 2019 and award date is August 30, 2019.

Arizona Department of Health Services is eligible for $450,000 and will apply for funding support, coordinate, and manage MMRC activities including use of MMRIA (ADHS already utilize).

Executive Summary

This funding will support agencies and organizations that coordinate and manage MMRC to identify and characterize maternal deaths for identifying prevention opportunities. Recipients will identify pregnancy-associated deaths within one year of death; abstract and enter clinical and non-clinical data into a standard data system [Maternal Mortality Review Information Application (MMRIA)], conduct multidisciplinary reviews, and enter committee decisions in MMRIA within 2 years of death. Quality assurance processes, in partnership with CDC, will be used by improving data quality, completeness, and timeliness. Recipients and CDC will analyze data and share findings with stakeholders to inform policy and prevention strategies to reduce maternal deaths.

Background

The death of a woman during pregnancy, at delivery, or soon after delivery is a tragedy for her family and for society as a whole. Sadly, about 700 women die each year in United States as result of pregnancy or delivery complications, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy. Further, considerable racial disparities exist, with black women almost 4 times more likely to die from pregnancy-related complications than white women. However, findings from MMRC indicate that more than half of these deaths are preventable. This funding will support MMRC to identify and characterize maternal deaths with the goal of identifying prevention opportunities.

Maternal Mortality Review is a process by which a multidisciplinary committee at the jurisdiction-level identifies and reviews cases of maternal death within one year of pregnancy. Review committees access multiple sources of clinical and non-clinical information that provide a deeper understanding of the circumstances surrounding a maternal death as they develop recommendations for action to prevent similar deaths in the future. This funding opportunity aims to better understand and prevent pregnancy-related deaths by supporting MMRCs to get the most detailed, complete data on causes and circumstances surrounding maternal deaths to develop recommendations for prevention. This multidisciplinary approach encourages collaboration with clinical and non-clinical partnership to improve quality of care and address social determinants of health to reduce health inequities.

MMRCs systematically and comprehensively review deaths to develop recommended strategies for preventing future deaths. These reviews help:

- Facilitate an understanding of the drivers of maternal mortality and complications of pregnancy and associated disparities;
- Determine what interventions at patient, provider, facility, system and community levels will have the most impact; and
- Implement initiatives in the right places for families and communities who need them most.

An Analysis of Severe Maternal Morbidity (SMM) among Native Americans in Arizona

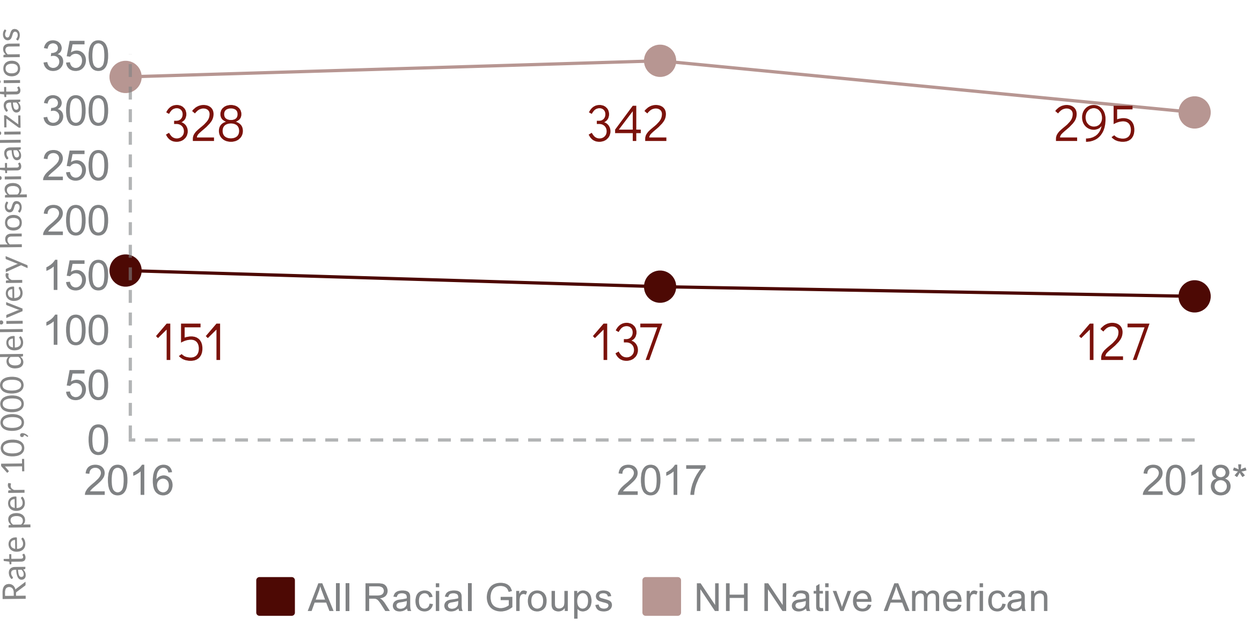
from the Arizona Hospital Discharge Database, 2016- 2018*

Severe Maternal Morbidity (SMM) results from **unexpected outcomes of labor and delivery such as hemorrhage, organ failure and stroke that lead to significant short- or long-term consequences to a woman's health.** SMM may result in an extended hospital stay, major surgery, other medical interventions or even death. SMM does not only affect the health of the women as their fetuses/neonates may suffer adverse outcomes like low birth weight, premature birth or even death.

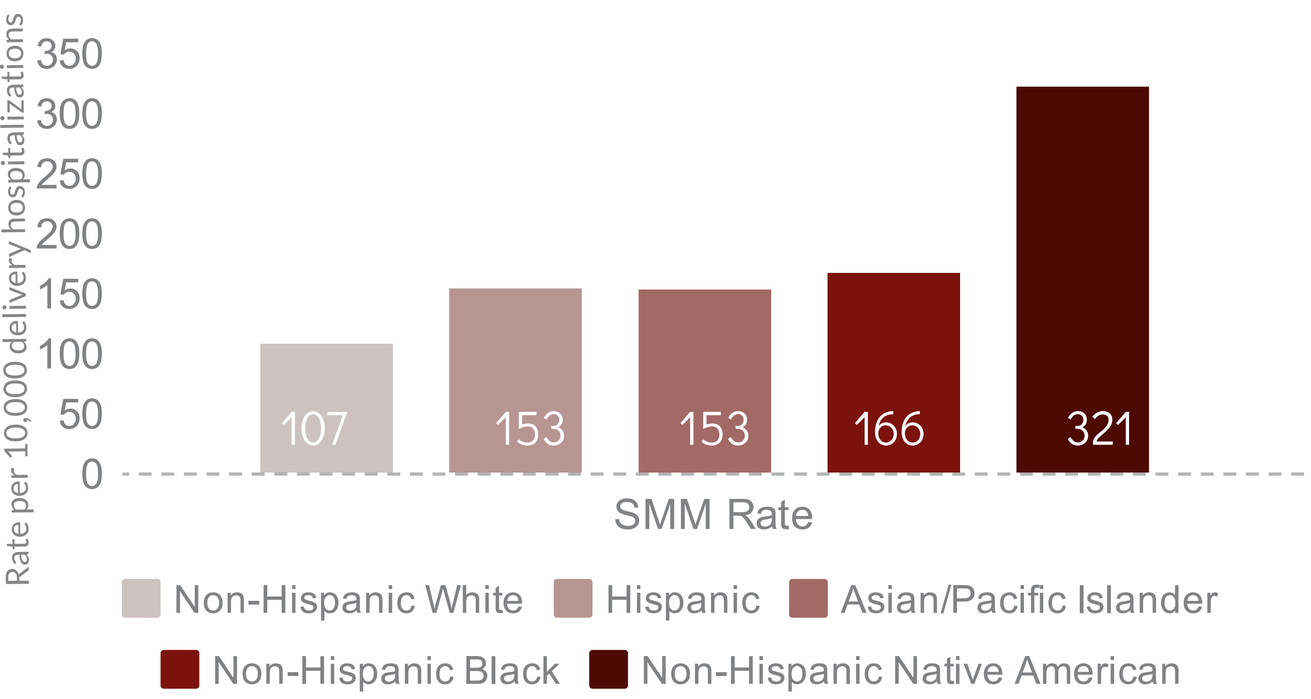
Number of SMM Cases by Year

	Non-Hispanic Native Americans	All Racial Groups
2016:	101 cases	1230 cases
2017:	81 cases	1057 cases
2018*:	38 cases	473 cases

SMM Rates by Year



SMM Rates by Racial Groups



Key Findings

- **Around 1,000 women in Arizona are affected by SMM every year, 35 for each maternal death in the state.**
- **Women of Color are disproportionately affected by SMM in Arizona compared to Non-Hispanic White Women.**
- **Approximately 220 SMM cases were identified in Native American Women.**
- **Native American Women had the highest SMM rate compared to all racial groups in Arizona.**
- **The most common indicator for morbidity are blood transfusions followed by disseminated intravascular coagulation and sepsis.**
- **Further analysis is needed to better describe SMM in Arizona and to successfully implement evidence-based safety guidelines for prevention in birthing facilities.**

*2018 data includes Quarters 1 and 2 of 2018

Arizona Department of Health Services
Bureau of Women's and Children's Health
Office of Assessment and Evaluateion
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