Centers for Disease Control and Prevention



Enhancing Reviews and Surveillance to Eliminate Maternal Mortality

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Burden of maternal mortality

Data from three important sources

National Vital	Pregnancy Mortality	Maternal Mortality
Statistics System	Surveillance System	Review Committees
Reports maternal deaths during pregnancy and <u>up to 42 days</u> <u>after delivery</u>	 Defines pregnancy-related death as during pregnancy or <u>within 1 year after pregnancy</u> Uses death certificates, linked birth or fetal death certificates, and other information as available 	 Review <u>all deaths that occur during</u> <u>pregnancy or within 1 year</u>, <u>regardless of cause</u> Gather data from multiple clinical and non-clinical sources to determine: pregnancy-relatedness, underlying cause, preventability, contributing factors and recommendations for action.

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MORTALITY REVIEW

Too many mothers die

700

- 700 women die each year in U.S. from pregnancy-related causes
- Includes during pregnancy, labor/delivery, or up to a year after the end of pregnancy
- **2-3X**
- American Indian/Alaskan Native 2 times more likely to die than white women
- Black women 3 times more likely to die than white women

66%

• About 66% of these deaths may be preventable

Petersen EE, Davis NL, Goodman D, et al. Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016. MMWR Morb Mortal Wkly Rep 2019;68:762–765. DOI: http://dx.doi.org/10.15585/mmwr.mm6835a3



Timing of deaths in relation to pregnancy

31% During pregnancy



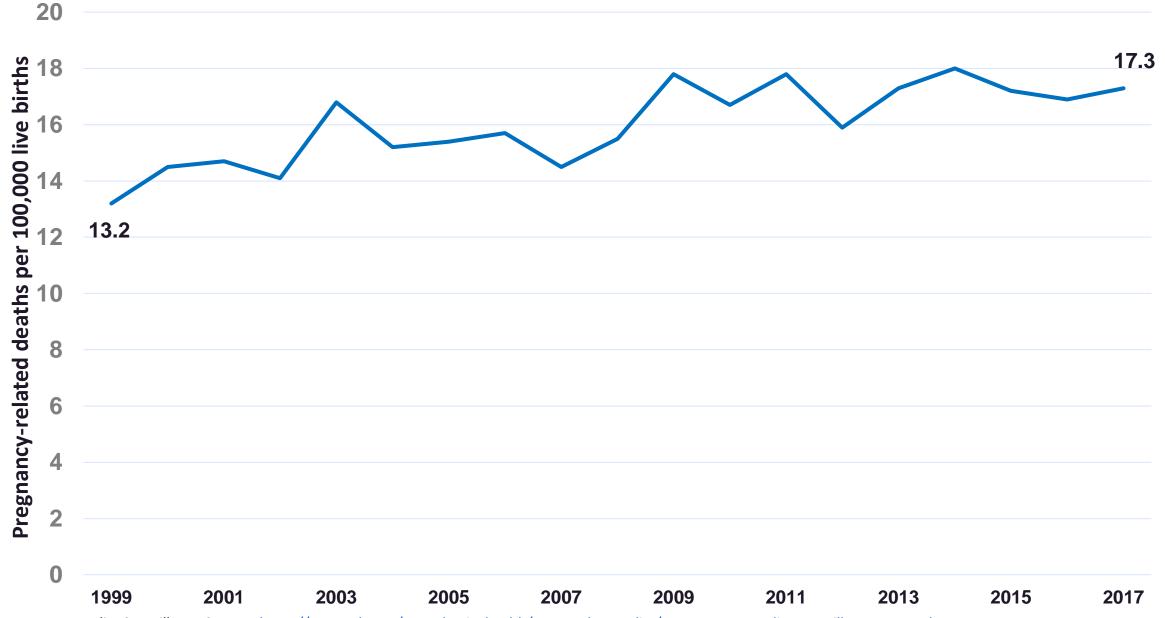


33% 1 week to 1 year after

Petersen EE, Davis NL, Goodman D, et al. Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016. MMWR Morb Mortal Wkly Rep 2019;68:762–765. DOI: http://dx.doi.org/10.15585/mmwr.mm6835a3

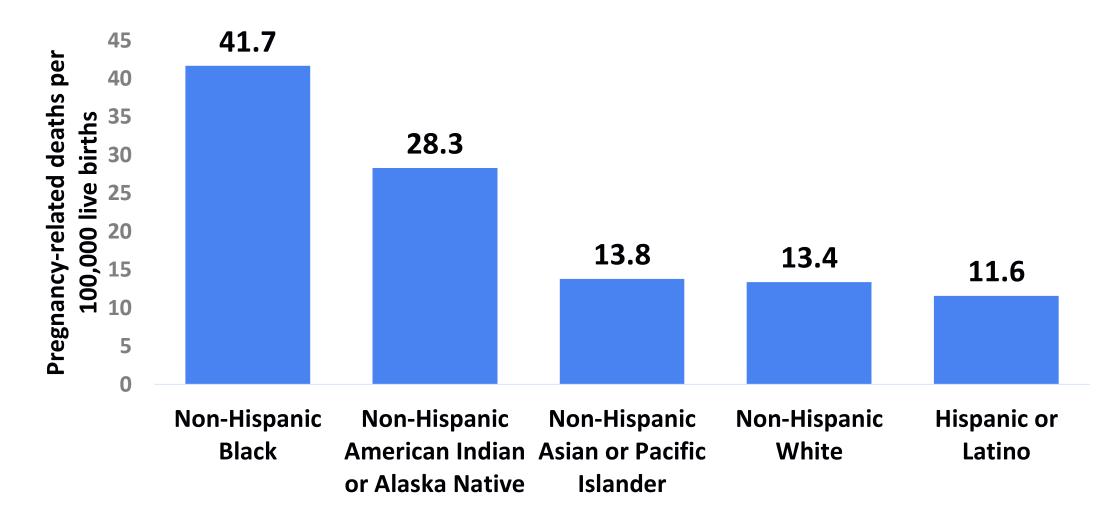


U.S. pregnancy-related mortality ratio, PMSS* 1999-2017



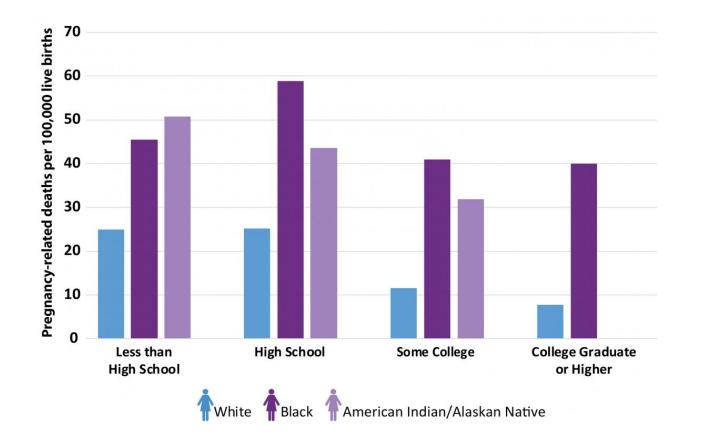
*CDC Pregnancy Mortality Surveillance System: <u>https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm</u>

U.S. pregnancy-related mortality ratio by race/ethnicity, PMSS 2014-2017



*CDC Pregnancy Mortality Surveillance System: <u>https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm</u>

U.S. pregnancy-related mortality ratio by race/ethnicity, PMSS 2014-2017





The PRMR for Black women with at least a college degree was 5x as high as white women with a similar education

Petersen EE, Davis NL, Goodman D, et al. Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016. MMWR Morb Mortal Wkly Rep 2019;68:762–765. DOI: http://dx.doi.org/10.15585/mmwr.mm6835a3



Jurisdiction-level Maternal Mortality Review Committees provide local maternal mortality data

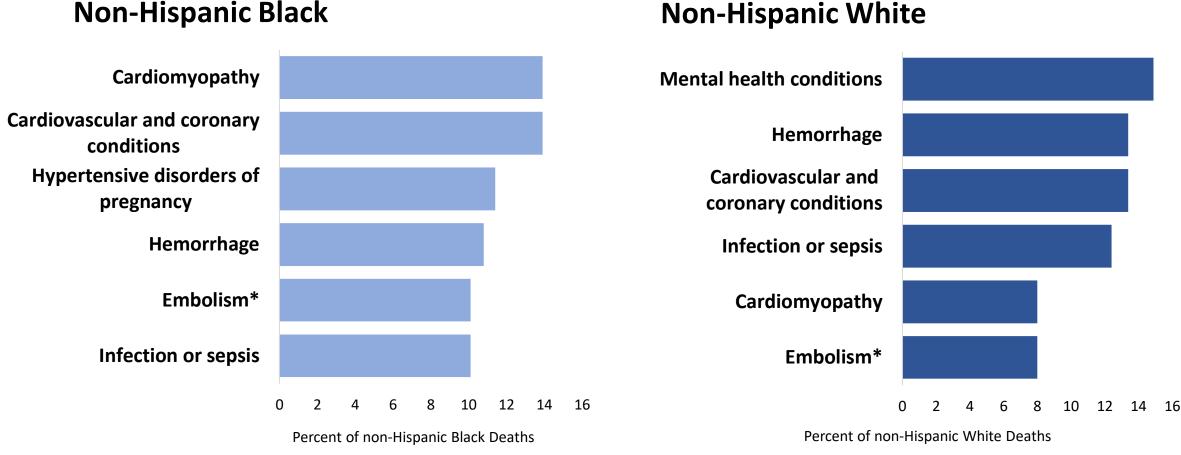


State and Local Maternal Mortality Review Committees (MMRCs)

Data Source	Death certificates and linked birth or fetal death certificates, medical records, social service records, autopsy, informant interviews, etc.	
Time Frame	During pregnancy – 1 year	
Source of Classification	Multidisciplinary committees	
Terms	Pregnancy associated, (Associated and) Pregnancy related, (Associated but) Not pregnancy related	
Measure	Pregnancy Related Mortality Ratio - # of Pregnancy Related Deaths per 100,000 live births	
Purpose	Understand medical and non-medical contributors to deaths, prioritize interventions that effectively reduce pregnancy-related deaths	

St. Pierre A, Zaharatos J, Goodman D, Callaghan WM. Challenges and opportunities in identifying, reviewing, and preventing maternal deaths. *Obstet Gynecol*. 2018;131(1):138–142.

Leading causes vary by race-ethnicity: 14 MMRCs



Data Source: <u>https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/mmr-data-brief.html</u>

Notes: * Embolism – thrombotic pulmonary and other embolisms

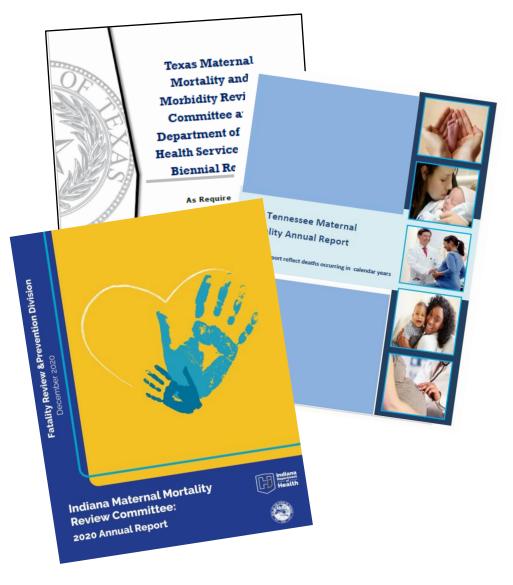
Review to Action

Staff present each *selected case* to the MMRC using the case narrative

MMRC discusses and makes key decisions about each death

Enter key decisions into MMRIA Analyze data, identify key issues and recommendation themes Prioritize recommendations for action, and disseminate findings

Data to action examples



- In 2020, 14 state MMRCs published a state report using their MMRC data
- IL, TN, and WA MMRC findings were used to support the extension of Medicaid coverage from 2-months to 1-year postpartum
- In response to a prioritized MMRC recommendation, the Utah Department of Health launched the <u>Utah Maternal Mental</u> <u>Health Resource Network</u>

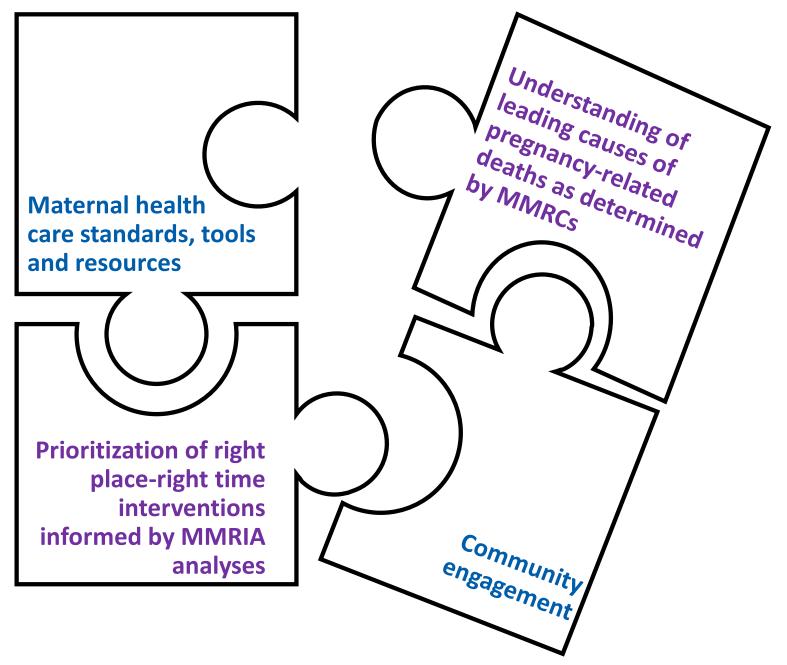
Equipping MMRCs to understand community context



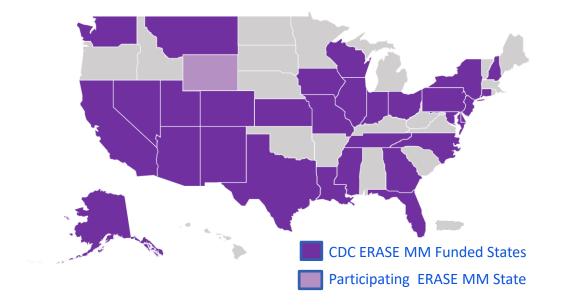
An MMRC cannot limit its focus to medical drivers alone—doing so will only get to about 50% of the reductions we want to achieve in maternal mortality. Include and integrate members who represent community and who understand health policy drivers. It is important that all members be trained in and sensitized to societal, ecological, and historical contexts.

Training and technical assistance on implementing the Community Vital Signs Web Portal and Recommendations Reference and understanding trauma are important tools.

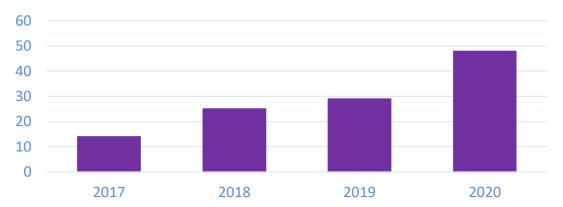
Data informing action

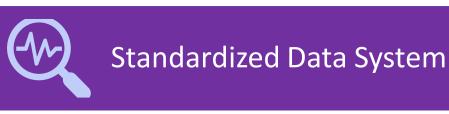


Investing in Maternal Mortality Review: Enhancing Reviews and Surveillance to Eliminate Maternal Mortality



Jurisdictions Using MMRIA







Technical Assistance, Job Aids, Tools, and Training

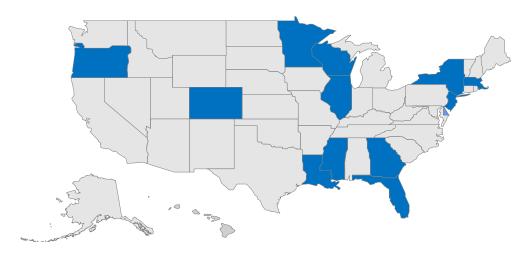


Funding (31 States in FY 21)

Innovation



Building the Infrastructure for Equity: Perinatal Quality Collaboratives (PQCs) Close Gaps in Care



CDC Funds 13 PQCs and a National Network of PQCs

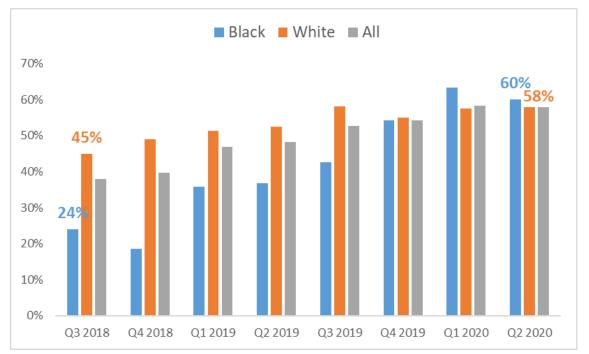






Quality Improvement Science Support

Comparison of percent of patients with OUD receiving MAT by delivery discharge by race



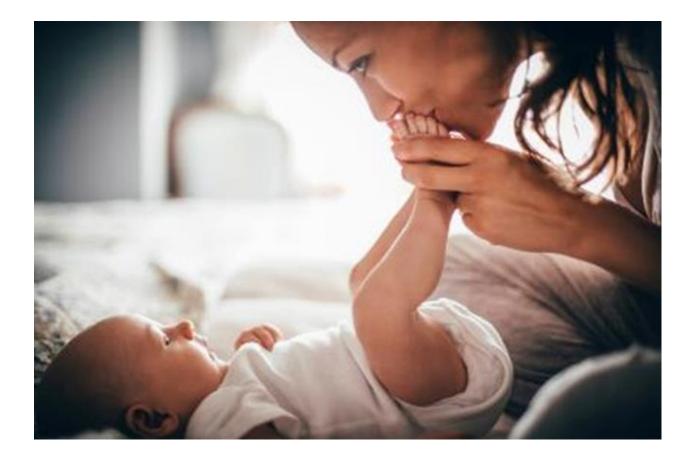
In Illinois, at baseline, Black patients with OUD were less likely to be on MAT. Across the initiative, improvements in MAT rates were seen for all patients with the greatest improvement for Black patients.

Help prevent pregnancy-related deaths.

HEAR HER CONCERNS

Thank you!

For more information, visit <u>www.cdc.gov/erasemm</u> or contact: <u>erasemm@cdc.gov</u>



The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

