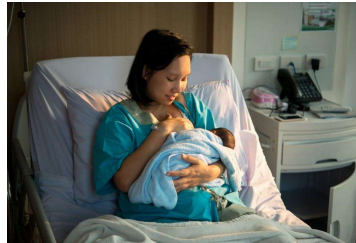


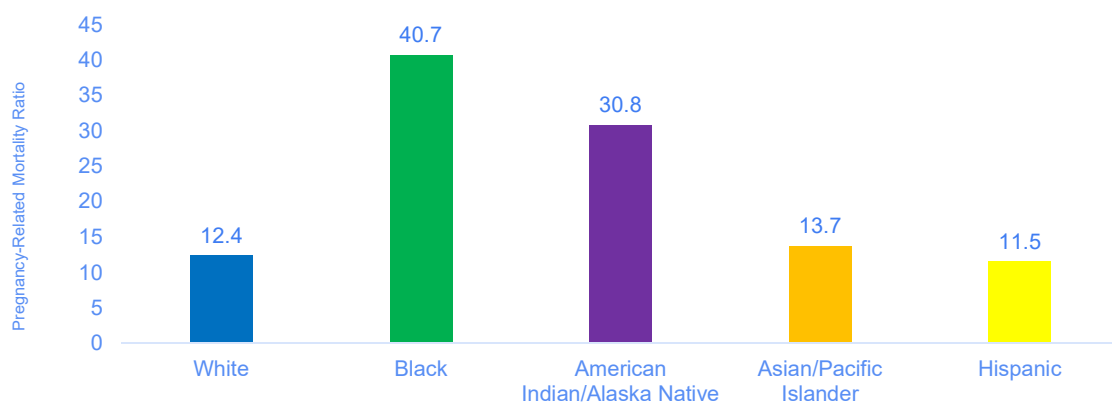


## CDC Efforts to Address Maternal Morbidity and Mortality

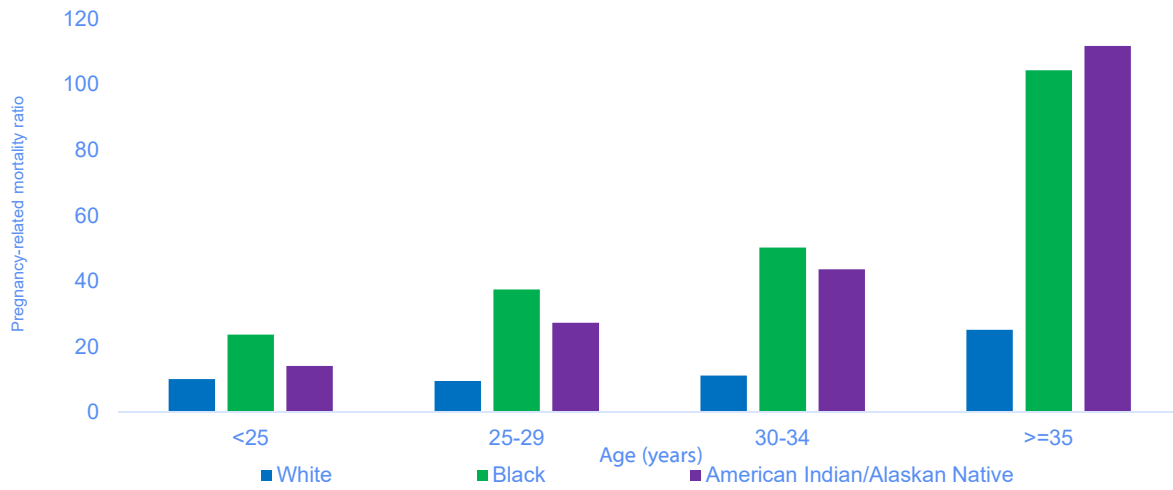


Shanna Cox, Associate Director for Science  
Division of Reproductive Health, CDC  
June 27, 2019

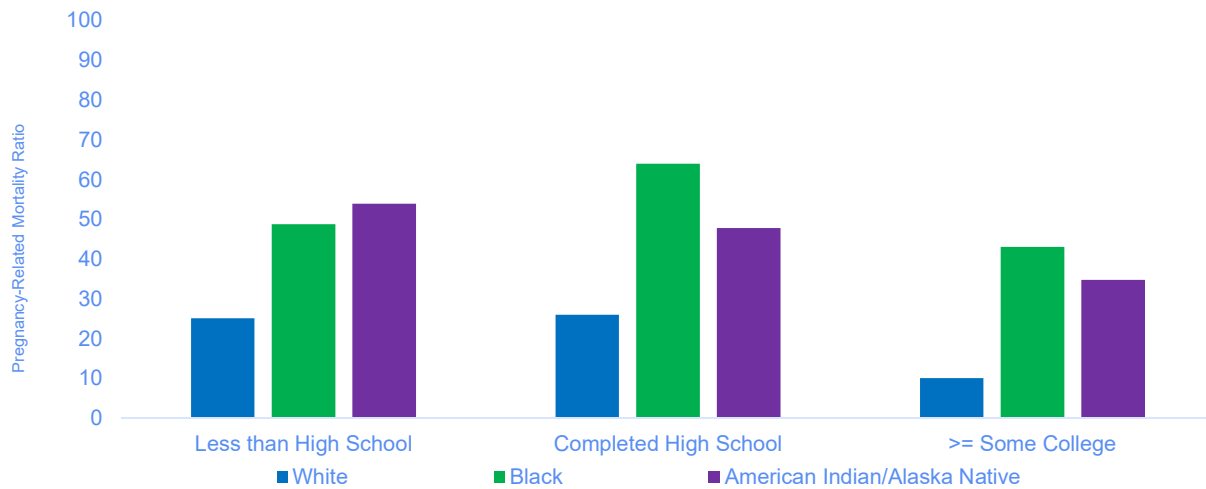
## Pregnancy-related Mortality in the U.S. PMSS: 2006–2015



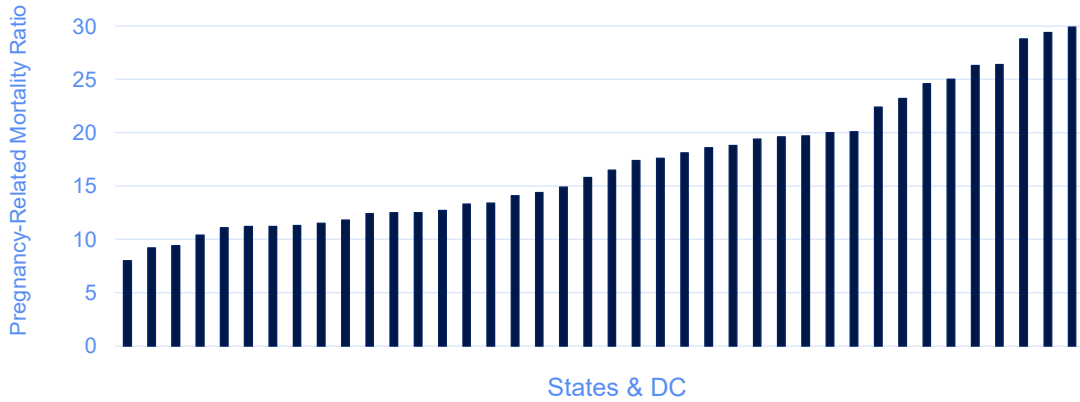
### PRMR by Race/Ethnicity and Age in the U.S. PMSS, 2006–2015



### PRMR by Race/Ethnicity and Education in the U.S. PMSS, 2006–2015

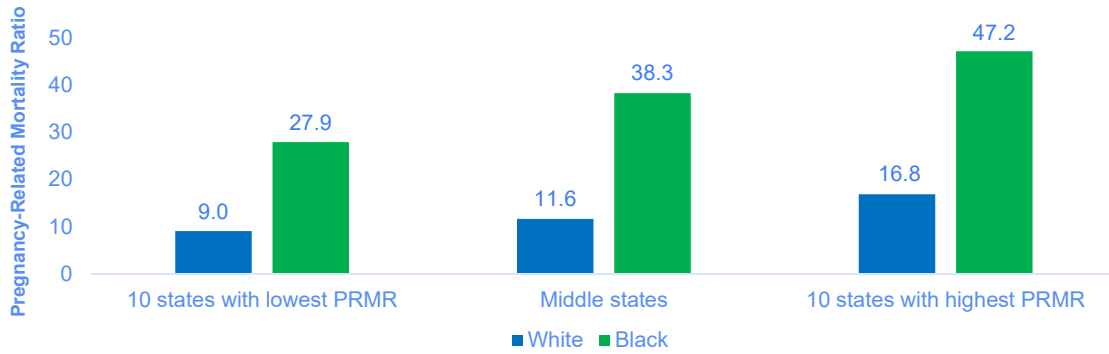


### State Pregnancy-Related Mortality Ratios, PMSS, 2006-2015



### Black:White Pregnancy-related Mortality Ratios, PMSS, 2006–2015

<b>Disparity Ratio:</b>	<b>3.1</b>	<b>3.3</b>	<b>2.8</b>
-------------------------	------------	------------	------------





## Leading Causes of Pregnancy Related Deaths 2011–2015

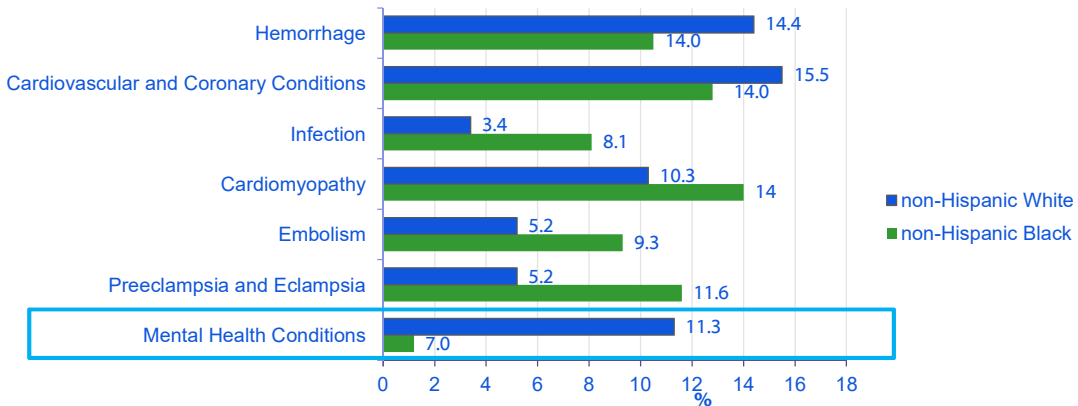
- Heart disease and stroke cause most deaths overall
- Obstetric emergencies, like severe bleeding and amniotic fluid embolism, cause most deaths at delivery
- In the week after delivery, severe bleeding, high blood pressure and infection are most common
- Cardiomyopathy causes most deaths 1 week to 1 year after delivery.

## Achieving Comprehensive Surveillance: Reviewing Maternal Deaths

- Challenging to track pregnancy-related deaths with vital statistics
- Maternal Mortality Review Committees (MMRCs) review deaths within one year of pregnancy
- Gather data from multiple sources to provide a deeper understanding

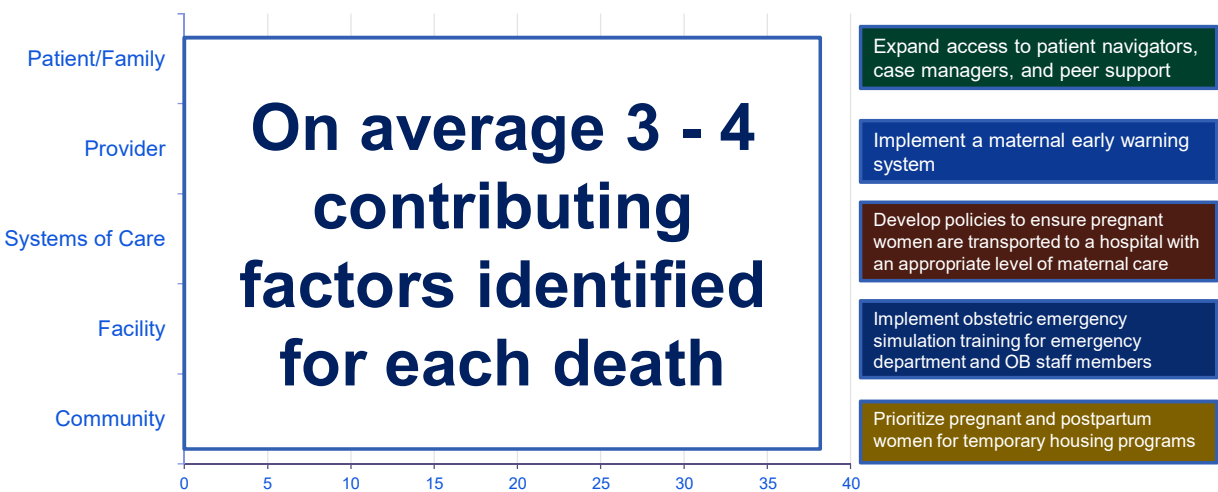


## Better Understand Causes and Contributing Factors, Data from 9 MMRCs



Adapted from: Building U.S. Capacity to Review and Prevent Maternal Deaths. (2018). Report from nine maternal mortality review committees.

## Contributing Factors & Recommendations from MMRCs



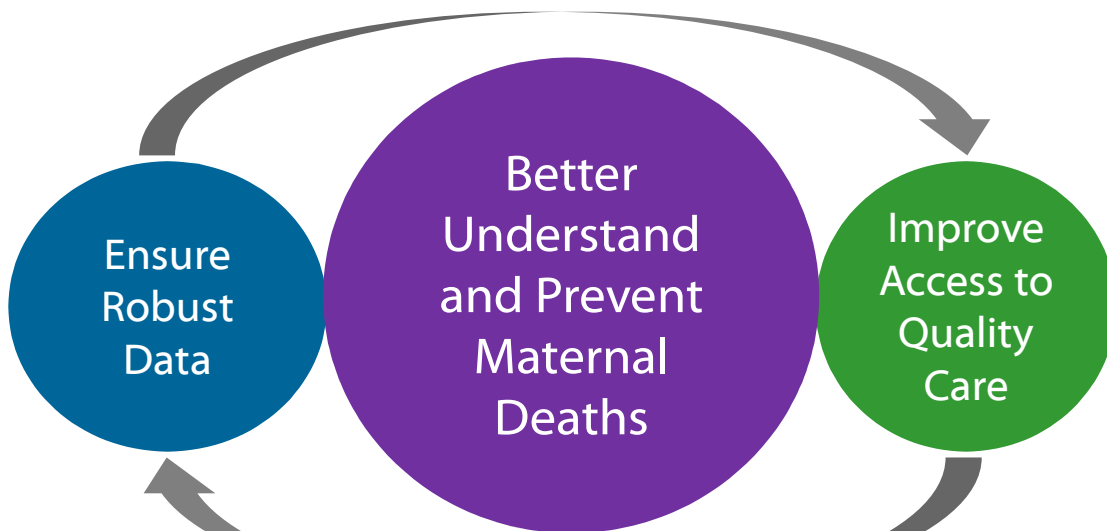
Adapted from: Building U.S. Capacity to Review and Prevent Maternal Deaths. (2018). Report from nine maternal mortality review committees & Petersen EE, Davis NL, Goodman D, et al. MMWR. 2019.

## Working with MMRCs to Address Emerging Issues: Pregnancy-associated Overdose Deaths

- CDC funding comprehensive review of all pregnancy-associated overdose deaths in 5 states
- Timely and Effective Use of MMRC overdose death findings
  - TA to ensure completeness, quality and use of data
  - Development and implementation of automated report from MMRIA
- Analyzing data across MMRCs to identify and describe prevention opportunities



## CDC's Activities to Prevent Maternal Deaths



## Improving the Quality of Care for Moms and Babies: Perinatal Quality Collaboratives

CDC funds 13 multidisciplinary teams working to improve outcomes for maternal and infant health by:

- Addressing gaps by working with clinical teams, experts and stakeholders
- Reducing variation and optimizing resources to improve perinatal care and outcomes
- Spreading best practices, including efforts with states that aren't funded through the National Network of Perinatal Quality Collaboratives



## Thank you!

For more information, please contact  
CDC Washington  
202-245-0600  
[www.cdc.gov/washington](http://www.cdc.gov/washington)



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.