

**Improving Outcomes for Mothers & Babies: Maternal Mortality in Florida**



- Florida’s maternal mortality rate from 2008–2018 was 18.2 per 100,000 live births. This pregnancy-related ratio is substantially higher than the Healthy People 2020 goal of 11.4.
- In 2018, 69 children in Florida no longer have a mother as a result of pregnancy related death.

**Prevalence & Impact**

Maternal Mortality is the death of a woman during pregnancy, at delivery, or soon after delivery.

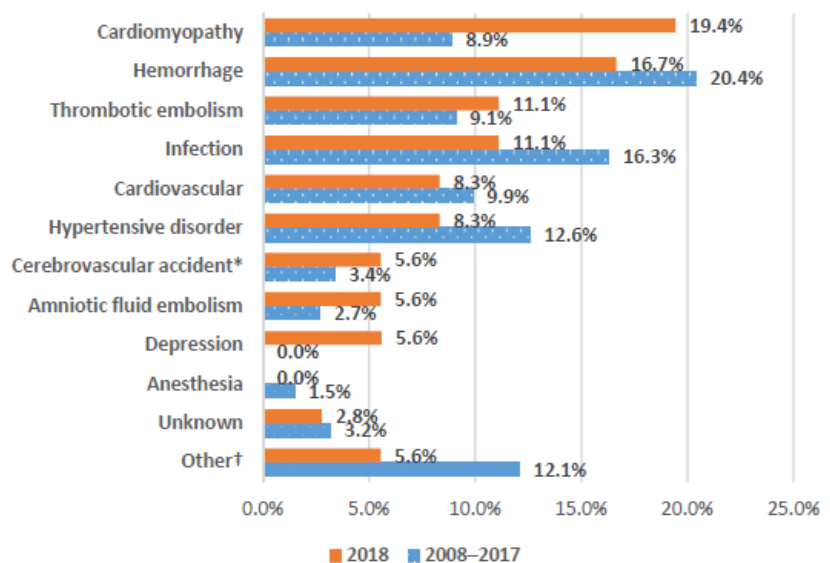
**700**

- Around 700 women die annually in the United States as a result of pregnancy or delivery complications.

- The maternal mortality rate has increased from 12.7 per 100,000 in 2002 to 17.4 per 100,000 in 2018.

The Florida Department of Health established Florida’s Pregnancy-Associated Mortality Review (PAMR) process to improve surveillance and analysis of pregnancy-related deaths (PRDs). PAMR is an ongoing surveillance process that involves data collection and examination of maternal deaths to promote evidence-based actions for individual behavior changes, health care system improvements, and prevention of PRDs.

**Distribution of Pregnancy-Related Causes of Death, Florida, 2008–2017 (n=406) and 2018 (n=36)**



In 2018, the leading underlying causes of PRDs in Florida were cardiomyopathy (19.4%), hemorrhage (16.7%), thrombotic embolism and infection (with 11.1% each), and cardiovascular diseases and hypertensive disorders (with 8.3% each).

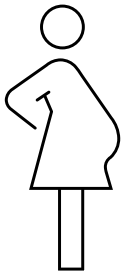
\*Cerebrovascular accident no known hypertensive disorders.

†Other is comprised of various causes of deaths not easily captured with enough numbers in a homogeneous category.

The trend towards a reduced PRMR in Florida from 2009-2018 may reflect activities of PAMR, other professional organizations including ACOG District XII and other community efforts such as the Florida Perinatal Quality Collaborative (FPQC). Additionally, Florida’s PAMR partners with the Florida Association of Healthy Start Coalitions (FAHSC) and local Healthy Start Coalitions in an effort to develop and support local systems of care to optimize the health of moms, babies and families.

The PAMR committee also develops Urgent Maternal Mortality Messages and works with the FPQC and FAHSC to target those leading causes. Two of these PAMR Urgent Maternal Mortality Messages to providers include Opioid Use During Pregnancy and Racial Disparity.

### Opioid Use During Pregnancy & Maternal Mortality



- **Drug-related deaths are now the leading cause of death to mothers during pregnancy or within one year after birth, accounting for 1 in 4 of these deaths in Florida.**

Substance use overdose (SUO) is a leading cause of death among women.

CDC data shows that during 2008–2012, about 1 in 3 reproductive-aged women filled an opioid prescription each year. According to 2019 data, about 7% of women reported using prescription opioid pain relievers during pregnancy and of those, 1 in 5 reported misuse.

Florida PAMR data shows almost 17% of the 2005-2018 pregnancy-associated deaths reviewed were the direct result of SUO. The pregnancy-associated risk ratio due to substance use, illicit or prescribed, increased 5x from 2005 to 2018, and the trend was statistically significant.

There have been significant increases in opioid use disorder during pregnancy. The number of women with opioid use disorder at labor and delivery increased more than 4x from 1999 to 2014.

### Racial Disparity & Maternal Mortality

**2-3X**

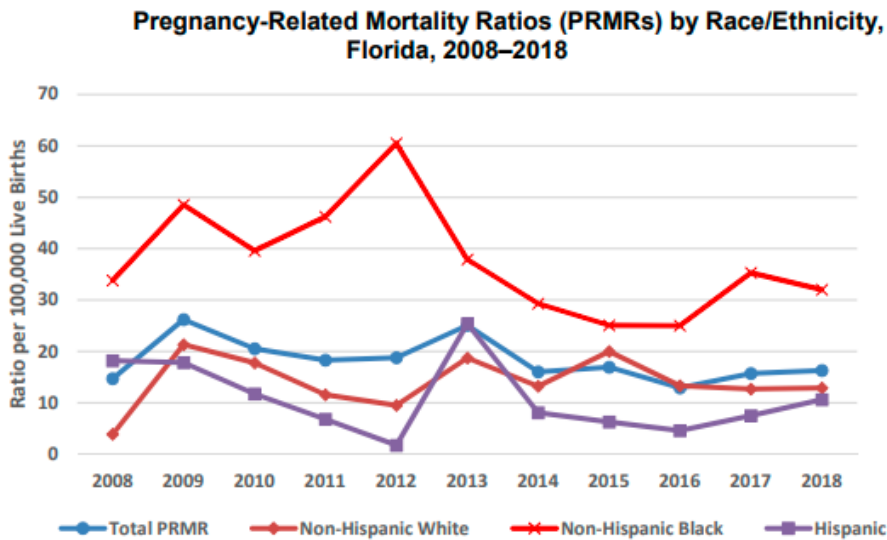
- **Black mothers in Florida are 2-3X more likely to die from pregnancy-related causes than White mothers.**

CDC data confirms significantly higher pregnancy-related mortality ratios among Black women.



According to the National Medical Association, Black women are three to four times more likely than White women to die during and within three months of pregnancy.

Additionally, Preeclampsia and peripartum cardiomyopathy (heart failure) are the leading cardiovascular causes of Black women dying within 3 months of having a baby. These cardiovascular illnesses are increased by being obese, having a cesarean delivery, hypertension or diabetes all conditions that affect Black women more often than White women.



Florida PRMRs exhibit consistent racial disparities. Throughout 2008-2018, non-Hispanic Black women exhibited higher PRMRs than non-Hispanic White or Hispanic women. During 2012, the PRMR for non-Hispanic Black women was 60.5, an all-time high. In 2018, the PRMR per 100,000 live births was 32.0 for non-Hispanic Black women, 12.9 for non-Hispanic White women, and 10.6 for Hispanic women.

### Strategies & Solutions

FAHSC recommends possible strategies and solutions.

- **Increase prenatal screening** – An increase in prenatal screening offers opportunity to identify moms who are at risk of maternal death. Through universal screening and FAHSC’s Connect intake and referral process, families are ensured streamlined access to evidence-based programs, home visitation services, and community supports that best meet their needs, which provide promising means of reducing maternal mortality. Please see referenced research below.
- **Enhance Medicaid benefits** – There are numerous benefits to enhancing Medicaid benefits. Please see related FAHSC issue paper on Enhancing Medicaid Benefits for Pregnant Women.

Florida’s PAMR findings and recommendations are proposed to address risk factors among individuals, communities, clinical, and health care systems to reduce maternal deaths and consequently improve maternal morbidity and the Florida Department of Health collaborates with diverse public and private organizations to pursue multifaceted approaches to moving recommendations into tangible actions.

- Improve Training & Education
- Enforce policies and procedures
- Improve access to quality care
- Improve patient & provider communication
- Improve standards regarding assessment, diagnosis, and treatment decisions
- Improve policies regarding prevention initiatives including screening procedures and substance use prevention or treatment programs
- Improve access to medical records
- Improve autopsy referral & acceptance

In response to the increasing number of pregnancy-associated deaths related to substance use, Florida’s PAMR Committee, the Florida Department of Health and the Florida Perinatal Quality Collaborative (FPQC) are implementing a quality improvement initiative that focuses on the maternal opioid use. The Maternal Opioid Recovery Effort (MORE) Initiative launched in November 2019 with 23 Florida hospitals participating.

A recurring recommendation from Florida's PAMR committee is the importance of women achieving optimal health and control of chronic diseases prior to pregnancy. FAHSC supports local systems of care to optimize the health of moms, babies, and their families. Through 31 local Healthy Start Coalitions, women can connect with quality, innovative programs in their community.

## References and Links

<https://www.cdc.gov/reproductivehealth/maternal-mortality/index.html>

<https://www.cdc.gov/preconception/men.html>

<https://www.cdc.gov/reproductivehealth/maternal-mortality/disparities-pregnancy-related-deaths/Infographic-disparities-pregnancy-related-deaths-h.pdf>

<https://www.cdc.gov/reproductivehealth/maternal-mortality/preventing-pregnancy-related-deaths.html>

<https://www.cdc.gov/pregnancy/opioids/basics.html>

<https://www.nationalpartnership.org/our-work/health/reports/black-womens-maternal-health.html>

<http://www.floridahealth.gov/statistics-and-data/PAMR/index.html>

[http://www.floridahealth.gov/statistics-and-data/PAMR/\\_documents/pamr-2018-update.pdf](http://www.floridahealth.gov/statistics-and-data/PAMR/_documents/pamr-2018-update.pdf)

<https://www.sciencedirect.com/science/article/abs/pii/S0027968420300912?via%3Dihub>

<https://www.hrsa.gov/maternal-health>

<https://doi.org/10.1177/1557988318776513>

<https://health.usf.edu/publichealth/chiles/fpqc/MORE>

<https://www.healthystartflorida.com/>

<https://www.sciencedaily.com/releases/2014/07/140708121726.html>

<https://jamanetwork.com/article.aspx?doi=10.1001/jamapediatrics.2014.472>