



THE ROLE OF WIC IN REDUCING MATERNAL MORTALITY POSITION PAPER

THE WIC PROGRAM

Every month, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) serves almost 2 million low-income pregnant and postpartum women.¹ WIC offers nutritious foods to supplement diets, nutrition counseling, breastfeeding support, and access to health services for the nation’s low-income women, infants, and children. Research shows that WIC participants are more likely to receive adequate prenatal care. With a mission to safeguard the health of this population, WIC plays a vital role in helping pregnant women who are at risk of maternal morbidity and mortality through its services and referral system.

The National WIC Association’s (NWA) Maternal Mortality Task Force created this position paper to consider ways in which maternal mortality is addressed and discussed with

program participants throughout the WIC appointment, as well as explore opportunities for additional focus on the topic. The Maternal Mortality Task Force fully recognizes that WIC clinic staff already have busy workloads and often work in fast-paced environments. The intention of this paper is not to create an additional burden for staff, but to identify and highlight opportunities during the WIC appointment wherein staff can help to address issues surrounding maternal mortality.

NWA is the nonprofit education arm and advocacy voice of the WIC program, the over 6 million mothers and young children served by WIC and the 12,000 service provider agencies who are the front lines of WIC’s public health nutrition services for the nation’s nutritionally at-risk mothers and young children. NWA’s efforts on behalf of WIC have been effective in gaining broad support for the program, including bipartisan support of the US

Congress, successive administrations, advocacy groups and coalitions, the healthcare sector, religious organizations, and CEOs of Fortune 500 corporations.

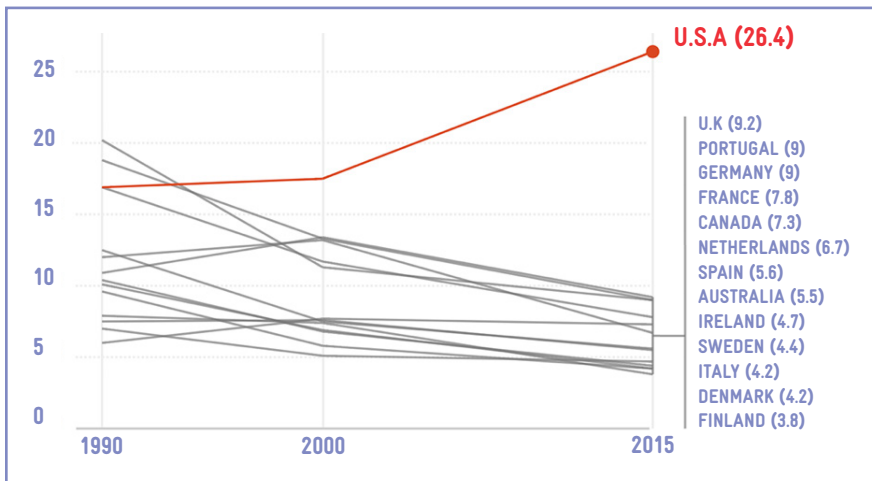
MATERNAL MORTALITY

The Centers for Disease Control and Prevention (CDC) define maternal mortality as the death of a woman while pregnant or within 1 year of the end of pregnancy, regardless of the outcome, duration or site of pregnancy—from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.² With 26.4 deaths per 100,000 live births in 2015, the United States has the highest maternal mortality rate of any industrialized country.³ And, while the maternal mortality rate has been steadily decreasing in other industrialized nations, the rate has been increasing in the US. Between 1990 and 2015, the maternal mortality rate increased by 56%.⁴ Even more unsettling is the fact that considerable racial disparities clearly exist with respect to maternal mortality.

From 2011 – 2016, the pregnancy-related mortality ratios were:⁵

- » Black non-Hispanic women: 42.4 per 100,000 live births
- » American Indian/Alaska Native women: 30.4 per 100,000 live births
- » Asian/Pacific Islander non-Hispanic women: 14.1 per 100,000 live births
- » White women: 13.0 deaths per 100,000 live births
- » Hispanic women: 11.3 deaths per 100,000 live births

FIGURE 1. MATERNAL MORTALITY RATES: 1990–2015



Source: Graph originally published online: <https://www.npr.org/2017/05/12/528098789/u-s-has-the-worst-rate-of-maternal-deaths-in-the-developed-world>. Data for this graph: GBD 2015 Maternal Mortality Collaboration. (2016) Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. The Lancet: Vol. 388 Issue 10053, pp.1775–1812. Accessed online: [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(16\)31470-2.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(16)31470-2.pdf).

MAJOR CAUSES OF MATERNAL MORTALITY IN THE US

The cause of death is unknown for 6.4% of all 2011–2016 pregnancy-related deaths.⁶ Severe maternal morbidity (SMM) refers to serious complications that are potentially life threatening if not identified, monitored, or treated efficiently and appropriately. Defined as unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman's health, these complications include hemorrhage, embolism, acute renal failure, stroke, and acute myocardial infarction, among others.⁷ SMM has been steadily increasing in recent years and affected more than 50,000 women in the United States in 2014.⁸ Oftentimes, SMM is included in maternal mortality discussions. However, for the purpose of this position paper, the task force is focusing solely on maternal mortality.

Although experts disagree on the exact percentage, there is strong consensus that a substantial proportion of maternal deaths are preventable.⁹

In fact, the CDC estimates that 59% of the maternal deaths in the United States should be preventable.¹⁰

Causes of death within 365 days postpartum were similar for US-born White and Black women. Cardiovascular disease, cardiomyopathy, and other pre-existing medical conditions emerged as chief contributors to mortality. Hypertensive disorders, hemorrhage, and embolism were the most important causes of pregnancy-related deaths for all other groups of women.¹¹ Preeclampsia, eclampsia, and embolism were the leading underlying causes of death among Black women.¹² The number of women entering pregnancy with

chronic medical conditions has increased. Consequently, the impact of chronic medical conditions on maternal mortality has increased, as well. This may be due to a shift toward older maternal age and an increase in maternal obesity, all of which have associated adverse health effects.¹³

The fact remains that over half of maternal deaths in the US are preventable. A report by CDC based on reviews by Maternal Mortality Review Committees (MMRC) shows that of 237 maternal deaths across nine states, 63% were preventable.¹⁴ Most deaths were related to clinician, facility, and system factors such as inadequate training, missed or delayed diagnosis of complications, delayed or ineffective responses to obstetric emergencies, or poor communication among clinicians.¹⁵ Therefore, reducing maternal mortality requires concerted efforts to ensure the highest quality and safety of healthcare, including maternity care, for all women.¹⁶

FACTORS CONTRIBUTING TO MATERNAL MORTALITY

The explanation for each of these factors is available in the full report. Some contributing factors regarding maternal mortality are listed below:

- » RACIAL AND ETHNIC CONSIDERATIONS
- » SOCIAL DETERMINANTS OF HEALTH
- » GENERATIONAL AND SOCIAL FACTORS

THE 12 TASK FORCE RECOMMENDATIONS: ADDRESSING MATERNAL MORTALITY IN WIC

NWA's Maternal Mortality Task Force convened to examine available evidence regarding WIC participation and maternal mortality to identify promising practices for helping to address the issue in WIC.¹⁷ The task

force was charged with the following: (1) to examine opportunities and avenues through which referrals and education around birth can be provided in WIC appointments, to increase knowledge surrounding maternal mortality; (2) to consider funding opportunities for possible pilots in WIC local agencies; and (3) to draft a position paper on WIC's role in reducing maternal mortality. Below are 12 recommendations for the WIC community that can help staff address maternal mortality within the WIC clinic setting. These recommendations are organized into three overarching buckets:

- » STAFF TRAINING
- » DIRECT SERVICES TO FAMILIES
- » ADVOCACY & PARTNERSHIPS

Please see the full report for suggestions related to the implementation of each recommendation. WIC agencies are encouraged to select 2 to 3 recommendations that can be implemented immediately.

» STAFF TRAINING

1. Increase staff awareness of maternal mortality and maternal health outcomes
2. Become culturally competent role models
3. Weave Life Course Perspective into WIC agency programs and projects
4. Acknowledge historical and intergenerational trauma
5. Educate staff on the effects of toxic stress and community trauma
6. Promote the positive impact of resilience and protective factors

» DIRECT SERVICES TO FAMILIES

7. Incorporate cultural inclusion into the WIC clinic
8. Encourage pre- and inter-conception care

9. Create Circles of Support for pregnant women and continue through postpartum
10. Promote self-advocacy
11. Incorporate staff diversity

» ADVOCACY & PARTNERSHIPS

12. Advocate for legislation related to maternal mortality

CONCLUSION

The roles that WIC plays—now and in the future—in addressing maternal mortality are paramount. As a program that serves almost 2 million low-income pregnant and postpartum women, WIC is a vital mechanism to help reduce maternal mortality. WIC already devotes attention to many of the factors contributing to maternal mortality, including those relevant to the social determinants of health and health equity. However, it will involve a concerted and collaborative effort from individuals, organizations, programs, and legislators nationwide to reduce maternal mortality and improve maternal and birth outcomes.

ACEs, historical and intergenerational trauma, institutional racism, and epigenetics, among other factors, play a role in a pregnant woman's physical, emotional, mental, and spiritual well-being—all of which impact the health outcome of her baby. Although WIC addresses maternal mortality in myriad ways, the program can enhance its focus through inclusiveness, staff training, direct services, and partnerships. It's time for the US to be on par with its peer nations and end the preventable deaths of pregnant and postpartum women nationwide.

GLOSSARY

For the definitions of key terms, see NWA's full report, "The Role of WIC in Reducing Maternal Mortality—Full Report."

WIC: EMPOWERING FAMILIES, STRENGTHENING COMMUNITIES

Please direct all questions to Darlena Birch, Senior Public Health Nutritionist, at dbirch@nwica.org

¹ National WIC Association (2019) Maternal Mortality in the US: The Role of WIC in Addressing the Crisis. Accessed online: <https://s3.amazonaws.com/aws.upl/nwica.org/2019-wic-maternal-mortality.pdf>.

² Centers for Disease Control and Prevention (2020) Pregnancy Mortality Surveillance System. Accessed online: <https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm>.

³ GBD 2015 Maternal Mortality Collaboration (2016) Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet*: Vol. 388 Issue 10053, pp. 1775–1812. Available online: [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(16\)31470-2.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(16)31470-2.pdf).

⁴ GBD 2015 Maternal Mortality Collaboration (2016) Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet*: Vol. 388 Issue 10053, pp. 1775–1812. Available online: [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(16\)31470-2.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(16)31470-2.pdf).

⁵ Centers for Disease Control and Prevention (2018) Pregnancy Mortality Surveillance System. Accessed online: <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html>.

⁶ Centers for Disease Control and Prevention (2018) Pregnancy Mortality Surveillance System. Accessed online: <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html>.

⁷ Centers for Disease Control and Prevention (2017) Reproductive Health: Severe Maternal Morbidity. Accessed online: <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html>.

⁸ Centers for Disease Control and Prevention (2017) Reproductive Health: Severe Maternal Morbidity. Accessed online: <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html>.

⁹ World Health Organization (2018) Maternal mortality ratio (per 100,000 live births). Accessed online: <https://www.who.int/healthinfo/statistics/indmaternalmortality/en/>.

¹⁰ Centers for Disease Control and Prevention Foundation (2017) Report from Maternal Mortality Review Committees: A View into Their Critical Role. Available online: <https://www.cdcfoundation.org/sites/default/files/files/MMRIARepor.pdf>.

¹¹ Creanga A, Berg C, Syverson C, Seed K, Bruce F, Callaghan W (2012) Race, Ethnicity, and Nativity Differentials in Pregnancy-Related Mortality in the United States: 1993–2006. *Obstetrics & Gynecology*: Vol. 120 Issue 2, pp. 261–268. Available online: <https://www.ncbi.nlm.nih.gov/pubmed/22825083>.

¹² Centers for Disease Control and Prevention (2018) Report from Nine Maternal Mortality Review Committees. Available online: <https://www.cdcfoundation.org/sites/default/files/files/ReportfromNineMMRCs.pdf>.

¹³ Berg C, Harper M, Atkinson S, Bell E, Brown H, Hage M, Mitra A, Moise K, Callaghan W (2005) Preventability of Pregnancy-Related Deaths: Results of a State-Wide Review. *Obstetrics & Gynecology*: Vol. 106 Issue 6, pp. 1228–1234. Available online: <https://www.ncbi.nlm.nih.gov/pubmed/16319245>.

¹⁴ Centers for Disease Control and Prevention (2018) Report from Nine Maternal Mortality Review Committees. Available online: <https://www.cdcfoundation.org/sites/default/files/files/ReportfromNineMMRCs.pdf>.

¹⁵ Centers for Disease Control and Prevention (2018) Report from Nine Maternal Mortality Review Committees. Available online: <https://www.cdcfoundation.org/sites/default/files/files/ReportfromNineMMRCs.pdf>.

¹⁶ Lu, Michael (2018) Reducing Maternal Mortality in the United States. *Journal of the American Medical Association*: Vol. 12 Issue 320, pp 1237–1238. Available online: <https://www.ncbi.nlm.nih.gov/pubmed/30208484>.

¹⁷ National WIC Association (2019) Maternal Mortality in the US: The Role of WIC in Addressing the Crisis. Accessed online: <https://s3.amazonaws.com/aws.upl/nwica.org/2019-wic-maternal-mortality.pdf>.

