Maternal Mortality and Morbidity Policy Statement

Position:

ASTHO affirms that preventing maternal mortality and morbidity is critical to promoting health across the lifespan. This is best accomplished by addressing the social, economic, and healthcare issues and barriers that impact women's health at multiple levels and identifying upstream causes of negative outcomes, rooted in the social determinants of health (SDOH).

Summary of Recommendations:

- Incorporate a Health-in-All-Policies approach using a health equity lens.
- Develop and sustain partnerships that address SDOH.
- Support preconception health and reproductive life course planning.
- Align maternal and infant professionals, payers, medical records, and clinical data to maintain a mother-baby dyad system.
- Optimize and assure opportunities for early entry into prenatal care and continuous care throughout pregnancy.
- Provide behavioral, mental health, substance use disorder, and intimate partner violence screening, referral, and treatment.
- Collect and analyze the data necessary to guide and evaluate these efforts.
- Ensure coordination to understand causes of maternal deaths and implement consistent maternity care.
- Increase financial and organizational support for, availability of, and access to evidence-based interventions.
- Develop flexible policies and funding to support state quality collaboratives.
- Enhance maternal care workforce and expand and improve services.

Background:

Rates of mortality and morbidity from pregnancy-related complications in the United States have increased steadily over the past three decades, resulting in a rate almost double that of other economically developed nations.[1] Deaths and "near-miss" incidents reflect failed opportunities within healthcare and public health systems to address problems such as access to care, overlooked diagnoses, and other warning signs leading to complications or death.[2] CDC's National Center for Health Statistics and the Pregnancy Mortality Surveillance System are the primary sources for national estimates of maternal mortality and pregnancy-related deaths. Data collected through these systems indicate that out of the 3.7 million births per year, approximately 700 pregnancy-related deaths occur in the United States.[1 3]

Complex medical conditions are the top documented causes of pregnancy-related mortality, including cardiovascular conditions, non-cardiovascular medical conditions, infection or sepsis, hemorrhage, and cardiomyopathy.[4,5] Severe maternal morbidity (SMM) constitutes complications during pregnancy, labor, or in the postpartum period that create short- or long-term effects on a woman's health. CDC estimates that SMM affects 50,000 women a year and has increased by almost 200% between 1993 and 2014.[6]

Significant disparities exist by race and ethnicity. Black and American Indian/Alaskan Native women are 3-4 times as likely to die from pregnancy-related complications than White women.[7,8,9, 10] In Black women, traditional protective factors such as education and income are shown to make little difference in risk of death related to pregnancy and birth.[11] Studies point to the role that centuries of structural racism and provider implicit bias have played in the policies and practice of obstetric care, resulting in dramatic disparities in birth and maternal outcomes.[12, 13]

Recommendations and Rationale:

ASTHO recommends the following policy and system-wide changes to reduce maternal mortality and morbidity:

Promote Health Equity in All Policies to Reduce Racial Disparities in Birth Outcomes

- Incorporate a Health-in-All-Policies approach when designing policies and interventions using a health equity focus, prioritizing the closure of the racial gap between White and Black mothers.
- Engage multi-sector partners to collaboratively address social determinants of health that influence maternal mortality and morbidity.[14]
- Prioritize investment in services for marginalized women of reproductive age, including those who are low income, under or uninsured, housing insecure or homeless, undocumented residents or immigrants, incarcerated, or members of populations of color or indigenous groups.[15] [16]
- Support ongoing evidence-based anti-racism and cultural humility training for providers and policy makers in the public health, healthcare, and social service sectors. Training should include historical context for racial inequities and illustrate how structural racism and implicit and explicit bias influence organizational behavior and decision-making. Training should include the benefits of provider diversity and inclusion to organizational success. [17, 18, 19]

Promoting Patient-Centered Care

- Maintain a mother-baby dyad system in practice and data collection.[20]
- Implement coordinated plans of care across specialties during and after pregnancy, including obstetric, maternal-fetal medicine, primary care, behavioral health, and human service providers through innovations in both health information technology and care navigation.[21, 22]
- Optimize opportunities for patient enrollment in the first trimester and continuous prenatal care to help reduce pregnancy complications, including early identification and management of chronic health conditions and reducing unhealthy behaviors such as tobacco or substance use. [23, 24]
- Provide behavioral and mental health screening, referral, and treatment for perinatal mood disorders during pregnancy, including rescreening at multiple points up to one year postpartum, including during pediatric well-child visits.[25, 26]
- Increase reimbursement by Medicaid and private insurance for providers using evidence-based screening tools to detect substance misuse and addiction, intimate partner violence, and perinatal mood and anxiety disorders early in pregnancy through one year postpartum.[27, 28]
- Promote the importance of regular well-woman care, including preconception and interconception care and access to family planning services. [29, 30]

Quality Improvement and Data Infrastructure

- Promote the development of Perinatal Quality Improvement collaboratives.[31,32,33,34,35,36]
- Invest in an integrated data infrastructure that allows for meaningful use of health information technology, greater data sharing, and interoperability to better identify and quickly address factors leading to maternal mortality and morbidity. Coordinate conclusions and recommendations from Maternal Mortality and Fetal Infant Mortality Review Committees. [37] [38]
- Align National Center for Health Statistics (NCHS) and Pregnancy Mortality Surveillance System (PMSS) collection tools with a common language to develop a more robust and consistent mode of measuring and reporting maternal mortality through Maternal Mortality Review Committees and appropriate data collection.[39,40]

State Policy and Funding

- Engage cross-sector actors to support policies shown to improve maternal outcomes, including paid family leave and evidence-based home visiting. [41, 42]

- Extend Medicaid coverage to one-year postpartum.[43, 44, 45, 46]
- Classify pregnant populations as a priority group in emergency planning.[47]
- Coordinate with and leverage key public health programs and funding sources at the state and federal level to address maternal mortality and morbidity risk factors (e.g., Title V Maternal and Child Health Services Block Grant; Title X Family Planning Program, etc.). Develop flexible policies and mechanisms that allow states to use federal funding to support maternal health policies, programs, and data improvement efforts. [48]

Workforce Development and Access to Care

- Develop policies to ensure an adequate perinatal workforce to provide woman- and community-centered obstetric care. Encourage further evaluation of promising practices by the U.S. Preventative Services Task Force or Women's Preventative Services Initiative, including expanding access to and payment for doula care and community health workers; using provider education funding to train more generalists for practice in rural areas and incentivize providers to work in marginalized communities to address physician workforce shortages; and removing barriers to practice.[49, 50, 51, 52, 53, 54, 55]
- Ensure that prenatal and specialty care services are available to pregnant women within a reasonable traveling distance or via telehealth technologies; ensure that proper supports for reaching that care are in place.[56, 57]

Approval Dates

Community Health and Prevention Policy Committee Approval: August 6, 2021
Board of Directors Approval: October 20, 2021
Policy Expires: October 31, 2024

For ASTHO policies and additional publications related to this policy statement, visit www.astho.org/Policy-and-Position-Statements.

ASTHO membership supported the development of this policy, which was subsequently approved by the ASTHO Board of Directors. Be advised that the statements are approved as a general framework on the issue at a point in time. Any given state or territorial health official must interpret the issue within the current context of his/her jurisdiction and therefore may not adhere to all aspects of this Policy Statement.

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[1] The Commonwealth Fund. "Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries" 11-18-2020.Available at https://www.commonwealthfund.org/publications/issue-briefs/2020/nov/maternal-mortality-maternity-care-us-compared-10-countries . Accessed 04-05-2021.
[2] CDC. "Pregnancy Related Deaths." Available at https://www.cdc.gov/vitalsigns/maternal-deaths/index.html . Accessed 04-05-2021.
[3] CDC. "FastStats - Births and Natality." Available at https://www.cdc.gov/nchs/fastats/births.htm . Accessed 04-05-2021.
[4] Callaghan WM. "Overview of Maternal Mortality in the United States." Seminars in Perinatology. 2012. 36:2-6. Available at http://www.seminperinat.com/article/S0146-0005(11)00148-0/fulltext. Accessed 11-17-2017.
[5] CDC. "Pregnancy Mortality Surveillance System." Available at http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PMSS.html. Accessed 11-9-2017.

[6] CDC. "Severe Maternal Morbidity in the United States." Available at https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html. Accessed 1-22-2020.
[7] CDC. "Pregnancy Mortality Surveillance System." Available at http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PMSS.html. Accessed 08-12-2019.
[8] CDC. "Pregnancy-Related Deaths." Available at https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-relatedmortality.htm. Accessed 08-12-2019.
[9] Creanga AA, Syverson C, Seed K, et al. "Pregnancy-Related Mortality in the U.S., 2011-2013." Obstetrics & Gynecology. 2017. 130:366-373. Available at https://www.ncbi.nlm.nih.gov/pubmed/28697109. Accessed 11-9-2017.
[10] NCHS. "Maternal Mortality." Available at https://www.cdc.gov/nchs/maternal-mortality/. Accessed 02-24-20.
[11] Martin, N. "Nothing Protects Black Women from Dying in Pregnancy and Childbirth." ProPublica. Available at https://www.propublica.org/article/nothing-protects-black-women-from-dying-in-pregnancy-and-childbirth. Accessed 04-27-2021.
[12] Taylor, J. (2020). Structural Racism and Maternal Health Among Black Women. Journal of Law, Medicine & Ethics, 48(3), 506-517. Accessed 05-22-2021.
[13] Scott KA, Britton L, McLemore MR. The Ethics of Perinatal Care for Black Women, The Journal of Perinatal & Neonatal Nursing: April/June 2019 - Volume 33 - Issue 2 - p 108-115. Accessed 05-22-2021.
[14] Center for Reproductive Rights. "Black Mamas Matter: A Toolkit for Advancing the Human Right to Safe and Respectful Maternal Health Care." Available at https://www.reproductiverights.org/document/black-mamas-matter-toolkit-for-advancing-human-right-to-safe-respectful-maternal-health-care. Accessed 4-22-2018.
[15] 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. Available at https://www.cdc.gov/mmwr/volumes/68/. Accessed 04-30-2021.
[16] Osterman M, Martin J. Timing and Adequacy of Prenatal Care in the United States. National Vital Statistics Reports. Vol 67. Num. 3. Mar 30, 2018. https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_03.pdf . Accessed 05-05-2021.
[17] Saluja B, Bryant Z. How Implicit Bias Contributes to Racial Disparities in Maternal Morbidity and Mortality in the United States. J Womens Health (Larchmt). 2021 Feb;30(2):270-273. doi: 10.1089/jwh.2020.8874. Epub 2020 Nov 25. PMID: 33237843. Available at https://www.liebertpub.com/doi/pdf/10.1089/jwh.2020.8874 . Accessed 05-05-2021.
[18] Bailey ZD, Kreiger NK, Agenor M, et al. "Structural racism and health inequities in the USA: evidence and interventions." The Lancet. Available at https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)30569-X/fulltext. Accessed 1-4-21.
[19] ASTHO. "Achieving Optimal Health for All." Available at https://www.astho.org/Policy-and-Position-Statements/Achieving-Optimal-Health-for-All/. Accessed 05-05-2021.
[20] Crenshaw JT. "Healthy Birth Practice #6: Keep Mother and Baby Together- It's Best for Mother, Baby, and Breastfeeding." J Perinat Educ. 2014 Fall;23(4):211-7. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4235060/ . Accessed 05-05-2021.
[21] Kroll-Desrosiers AR, Crawford SL, Moore Simas TA, Rosen AK, Mattocks KM. "Improving Pregnancy Outcomes through Maternity Care Coordination: A Systematic Review." Women's Health Issues. 2016 Jan-Feb;26(1):87-99. Available at https://www.whijournal.com/article/S1049-3867(15)00160-7/fulltext . Accessed 05-05-2021.
[22] Hillemeier MM, Domino ME, Wells R, Goyal RK, Kum HC, Cilenti D, Basu A. "Does Maternity Care Coordination Influence Perinatal Health Care Utilization? Evidence from North Carolina." Health Serv Res. 2018 Aug;53(4):2368-2383. doi: 10.1111/1475-6773.12742. Epub 2017 Jul 20. Available at https://onlinelibrary.wiley.com/doi/abs/10.1111/1475-6773.12742 . Accessed 05-05-2021.
[23] Robbins C, Martocci S. "Timing of Prenatal Care Initiation in the Health Resources and Services Administration Health Center Program in 2017." Ann Intern Med. 2020 Dec 1;173(11 Suppl):S29-S36. Available at https://www.acpjournals.org/doi/10.7326/M19-3248 . Accessed 05-05-2021.

[24] Eunice Kennedy Shriver National Institute of Child Health and Human Development. "What is prenatal care and why is it important?" Available at https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/prenatal-care. Accessed 4-22-2018.
[25] Earls, MF, Yogman, MW, Mattson, GM, Rafferty J, and Committee on Psychosocial Aspects of Child and Family Health. "Incorporating Recognition and Management of Perinatal Depression into Pediatric Practice." Pediatrics. January 2019, 143 (1) e20183259. Available from: https://pediatrics.aappublications.org/content/143/1/e20183259. Accessed 01-06-2020.
[26] American College of Obstetricians and Gynecologists. "ACOG Committee Opinion Number 630: Screening for Perinatal Depression." 2015. Available from: https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Screening-for-Perinatal-Depression. Accessed 05-28-2018.

[28] Srinivasan S, Schlar L, Rosener S, Frayne S, Hartman M, Horst J, Brubach S. "Delivering Interconception Care During Well-Child Visits: An IMPLICIT Network Study." The Journal of the American Board of Family Medicine Mar 2018, 31 (2) 201-210.
[29] Frayne D. "A Paradigm Shift in Preconception and Interconception Care Using Every Encounter to Improve Birth Outcomes." Zero to Three. March 2017. Available at http://beforeandbeyond.org/wp-content/uploads/2017/01/Zero-to-Three-Article-for-Dr.-Frayne.pdf . Accessed 05-22-21.
[30] Verbiest S, McClain E, Woodward S. (2016) Advancing preconception health in the United States: strategies for change, Upsala Journal of Medical Sciences, 121:4, 222-226. Available at https://www.tandfonline.com/doi/pdf/10.1080/03009734.2016.1204395?needAccess=true . Accessed 05-22-2021.
[31] Swamy GK, Heine RP. "Vaccinations for Pregnant Women." *Obstet Gynecol.* 2015. 125:212-226. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4286306/. Accessed 4-22-2018.
[32] CDC. "Flu Vaccination Coverage Among Pregnant Women – United States, 2015-2016 Flu Season." Available at https://www.cdc.gov/flu/fluvaxview/pregnant-coverage_1516estimates.htm. Accessed 4-22-2018.
[33] CDC. "Pregnant Women and Tdap Vaccination, Internet Panel Survey, United States, April 2016." Available at https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/tdap-report-2016.html. Accessed 4-22-2018.
[34] CDC Public Health Grand Rounds. "Public Health Strategies to Prevent Preterm Births." 2015. Available at https://www.cdc.gov/grand-rounds/pp/2015/20151116-preterm-birth.html. Accessed 4-22-2018.
[35] Gareau S, Lopez-DeFede A, Loudermilk BL, et al. "Group prenatal care results in Medicaid savings with better outcomes: a propensity score analysis of Centering Pregnancy participation in South Carolina." Maternal and Child Health Journal. 2016. 20:1384-1393. Available from: https://link.springer.com/article/10.1007/s10995-016-1935-y. Accessed 05-28-2018.
[36] Clark S, Miller D, Belford M, Dildy G, et al. "Neonatal and maternal outcomes associated with elective term delivery." American Journal of Obstetrics and Gynecology. 2009. 200:156.e1-.e4
[37] Advisory Committee on Infant Mortality (ACIM). Letter to Secretary Azar, June 29, 2020. Available at: https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/infant-mortality/correspondence/June-29-COVID-19-Recommendations.pdf. Accessed: 09-24-2020.
[38] National Conference of State Legislators. Preventing Infant and Maternal Mortality: State Policy Options. 2019. Available at https://www.ncsl.org/research/health/preventing-infant-and-maternal-mortality-state-policy-options.aspx . Accessed 05-24-2021.
[39] CDC. "The Impact of the Pregnancy Checkbox and Misclassification on Maternal Mortality Trends in the United States, 1999–2017." Available at https://www.cdc.gov/nchs/data/series/sr_03/sr03_044-508.pdf . Accessed 04-27-2021.
[40] Kozhimannil, K. Hernandez, E. Mendez, D. D. Chapple-McGruder, T. "Beyond the Preventing Maternal Deaths Act: Implementation And Further Policy Change." https://www.healthaffairs.org/do/10.1377/hblog20190130.914004/full/ . Accessed 04-27-2021.
[41] Dodge K, Goodman W, Murphy R, O'Donnell K, Sato J, Guptill S. Implementation and Randomized Controlled Trial Evaluation of Universal Postnatal Nurse Home Visiting. Am J Public Health. 2014;104(S1):S136-S143. doi:10.2105/ajph.2013.301361

[42] Weber A, Harrison T, Steward D, Ludington-Hoe S. "Paid Family Leave to Enhance the Health Outcomes of Preterm Infants. Policy, Politics, & Nursing Practice." 2018;19(1-2):11-28. doi:10.1177/1527154418791821
[43] Georgetown University Health Policy Institute. "HHS Secretary Becerra Approves Illinois Waiver Request to Extend Postpartum Medicaid Coverage." 2021. Available at: https://ccf.georgetown.edu/2021/04/12/hhs-secretary-becerra-approves-illinois-waiver-request-to-extend-postpartum-medicaid-coverage/. Accessed 05-04-2021.
[44] Eckert E. "It's Past Time to Provide Continuous Medicaid Coverage for One Year Postpartum." Health Affairs Blog. 2020. Available at https://www.healthaffairs.org/do/10.1377/hblog20200203.639479/full/. Accessed at 02-07-2020.
[45] Advisory Committee on Infant Mortality (ACIM). Letter to Secretary Azar, June 29, 2020. Available at: https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/infant-mortality/correspondence/June-29-COVID-19-Recommendations.pdf. Accessed: 09-24-2020.
[46] Ollove, M. "States Push to Extend Postpartum Medicaid Benefits to Save Lives." Pew Trusts 2021. Available at https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2021/05/05/states-push-to-extend-postpartum-medicaid-benefits-to-save-lives . Accessed 05-05-2021.
[47] Advisory Committee on Infant Mortality (ACIM). Letter to Secretary Azar, June 29, 2020. Available at: https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/infant-mortality/correspondence/June-29-COVID-19-Recommendations.pdf. Accessed: 09-24-2020.
[48] ASTHO, DeBeaumont Foundation, NASHP. "Blending, Braiding, and Block-Granting Funds for Public Health and Prevention: Implications for States." Available at https://www.nashp.org/wp-content/uploads/2017/12/deBeaumont.pdf . Accessed 05-05-2021.
[49] Bohren MA1, Hofmeyr GJ, Sakala C, et al. "Continuous support for women during childbirth." Cochrane Database Syst Rev. 2017. Available at https://www.ncbi.nlm.nih.gov/pubmed/28681500. Accessed 08-12-2019.
[50] American College of Obstetricians and Gynecologists. "ACOG Committee Opinion No. 687. Approaches to Limit Intervention During Labor and Birth." 2017. Available from: https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Approaches-to-Limit-Intervention-During-Labor-and-Birth?IsMobileSet=false. Accessed 08-12-2019.
[51] March of Dimes. "March of Dimes Position Statement Doulas and Birth Outcomes." 2019. Available at https://www.marchofdimes.org/materials/Doulas%20and%20birth%20outcomes%20position%20statement%20final%20January%2030%20PM.pdf. Accessed 08-12-2019.
[52] Thomas MP, Ammann G, Brazier E, et al. "Doula Services Within a Healthy Start Program: Increasing Access for an Underserved Population." Matern Child Health J. 2017. 21 (Suppl 1):59-64. Available at https://www.ncbi.nlm.nih.gov/pubmed/29198051. Accessed 08-12-2019.
[53] Advisory Committee on Infant Mortality (ACIM). Letter to Secretary Azar, June 29, 2020. Available at: https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/infant-mortality/correspondence/June-29-COVID-19-Recommendations.pdf. Accessed: 09-24-2020.
[54] American College of Obstetricians and Gynecologists. "ACOG Committee Opinion Number 630: Screening for Perinatal Depression." 2015. Available from: https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Screening-for-Perinatal-Depression. Accessed 05-28-2018.
[55] Advisory Committee on Infant Mortality (ACIM). Letter to Secretary Azar, June 29, 2020. Available at: https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/infant-mortality/correspondence/June-29-COVID-19-Recommendations.pdf. Accessed: 09-24-2020.
[56] Hung P, Henning-Smith CE, Casey MM, et al. "Access to Obstetric Services in Rural Areas Still Declining, With 9 Percent Losing Services, 2004-2014." *Health Affairs.* 2017. 36:1663-1671. Available at https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2017.0338?journalCode=hlthaff. Accessed 4-22-2018.
[57] Kozhimannil KB, Hung P, Henning-Smith CE, et al. "Association Between Loss of Hospital-Based Obstetric Services and Birth Outcomes in Rural Counties in the United States." *JAMA.* 2018. 319:1239-1247. Available at https://jamanetwork.com/journals/jama/article-abstract/2674780?redirect=true. Accessed 4-22-2018.