# Maternal & Child Health

### **KEY TAKEAWAYS**

- 1. The quality of a mother's health before, during, and after pregnancy has lifelong impacts on the health and wellbeing of both mother and baby.
- 2. The national maternal mortality crisis is compounded in Texas by maternity care deserts across the state.
- 3. The best approach for preventing maternal death is ensuring adequate health care services before, during, and after pregnancy.
- 4. Midwives, doulas, home health nurses, and community health workers can help bolster the maternal care workforce, especially in rural communities.
- 5. Ensuring adequate and timely data collection and analysis of state maternal and infant morbidity and mortality is important to monitor trends.

# The quality of a mother's pregnancy determines the well-being of her infant and lays the foundation for a child's *lifelong* health trajectory. (1)

• Prenatal experiences like maternal malnutrition, elevated levels of stress hormones, or exposure to toxins are linked to disease outcomes later in life through: (a) physiologic changes that can impact either the developing fetus directly or (b) the health of the mother, which in turn affects fetal development. (2,3)

### Pregnancy can also impact the health of the mother beyond the birth of her child.

- Some women will develop medical issues like pre-eclampsia or gestational diabetes during pregnancy, which can lead to higher lifelong risks for conditions like cardiovascular disease, type 2 diabetes, and stroke. (4, 5)
- Pre-eclampsia, a serious form of high blood pressure during pregnancy, is linked to hemorrhaging, one of Texas's leading causes of pregnancy-associated deaths. (6,7)





#### The maternal mortality crisis in the U.S. is well documented.

- The most recent data published in 2023 by the National Center for Health Statistics show 32.9 maternal deaths for every 100,000 live births in 2021, up 64% in just two years from 20.1 per 100,000 in 2019. (9)
- Racial disparities in maternal mortality have persisted for years. (10) Black women in the U.S. are over 2.5 times as likely to die from pregnancy complications than white women are, regardless of socioeconomic status. (9)







#### Texas accounts for about 10% of all live births in the U.S. Texas had the 5<sup>th</sup> highest birth rate in 2021 with over 373,000 babies born. (11, 12)

The Maternal Mortality and Morbidity Review Committee (MMMRC) was established in 2013 during the 83<sup>rd</sup> Texas Legislature through SB 495. This committee uses standardized methods to review every maternal death to identify contributing causes of each death and determine whether these deaths were preventable. (7)

#### In 2019, the leading causes of maternal death were: (7)

• Obstetric hemorrhage

Mental health conditions

- EmbolismInjury
- Cardiovascular conditions
- Infection

#### 90% of these deaths were deemed preventable. (7)

The maternal mortality ratio among Black women in Texas is *more than twice* the ratio among White women, and *four times* that of Hispanic women. (7)

Data from the MMMRC and Texas Department of State Health Services Joint Biennial Reports are collected from hospitals, Medicaid databases, and death certificates.

- Texas is the only state that requires all personal information to be redacted from medical records prior to review by the MMMRC. (13)
- Data collection and analysis then become time consuming and complicated, and the ability to understand and prevent maternal death becomes hampered. (13, 14)



Ensuring access to timely, high-quality healthcare before, during, and after pregnancy is important in improving the health of the mother and infant.



It is recommended that pregnant women schedule their first appointment with an obstetrician-gynecologist (OB-GYN) during the first trimester. In 2020, **Texas had the lowest proportion of mothers who met this recommendation compared to other states,** with only 67.7% as opposed to 76.1% nationally. (15)





Of all 50 states, Texas has the 5th highest percentage of births to women not receiving adequate prenatal care, at 19.8%. (16)

 Approximately half of women of reproductive age in the U.S. skip or delay needed care due to costs, likely driven by the lack of adequate medical insurance coverage. (17)



#UTHealth Houston School of Public Health

A



### **Postpartum Data**

#### Many mothers put off accessing medical care after delivery.

As of 2021, anywhere from 11-50% of women did not attend a postpartum visit (18), which means chronic health conditions and contraception are not effectively managed in the postpartum period. Attendance rates are lower among populations with limited resources, exacerbating existing health disparities. (19)

#### Medical care in the postpartum period is necessary.



Substance use disorder and mental health disorders are leading causes of maternal death. It is imperative for women to receive integrated, comprehensive healthcare for the duration of the postpartum period. (21)

### MATERNITY CARE DESERT

Texas, 2021



#### **Maternity Care Deserts**

Consistent, high-quality medical care is essential to protect the health of all moms and babies. However, geographical access to healthcare is another issue many families in Texas face, particularly in maternity care access.

In 2021, Kent, Kinney, Duval, Val Verde, Jeff Davis, and Edwards counties reported at least 55% of mothers not entering prenatal care during the first trimester. (15)

March of Dimes defines a maternity care desert as any county without a hospital or birth center offering obstetric care, and without any obstetric providers. (22)

© 2024 March of Dimes. All rights reserved.

**12.0**%

births nationwide take place in counties with limited or no access to maternity care. (22) 22.8%

Texas counties have low access to maternity care. (23) **49.2%** 

Texas counties meet the criteria defining maternity care deserts. (23)

# **55.9%**

Texas counties do not have a single OB provider. (23)



#UTHealth Houston School of Public Health



# Studies show that failing to invest in the well-being of women and children during pregnancy and the early years of life results in major losses of economic productivity and higher burdens of healthcare costs. (1)

Policy solutions to these issues include:

#### 1) Expanded Access to Maternal Healthcare

a) Postpartum Medicaid Coverage

- To ensure that women have the means to access necessary health care during the medically vulnerable postpartum period, Medicaid coverage should last the duration of the first year after birth.
- The 88th Texas Legislature passed HB12 on May 29, 2023, extending the state's postpartum coverage from 2 months to 12. It was signed by the Governor June 18, 2023 and went into effect March 1, 2024.

b) Increased use of Group Prenatal Care

• Group Prenatal Care provides education, support, and obstetric care in a group format. (24) In Texas, Group Prenatal Care is billable to insurance, including Medicaid, and even receives enhanced reimbursement rates.

c) Support Texas Child Mental Health Care Consortium's upcoming PeriPAN initiative

• A pilot expansion of the Child Psychiatry Access Network (CPAN), the Perinatal Psychiatry Access Network (PeriPAN) is a hotline for consultation between psychiatrists and obstetricians, Certified Nurse Midwives, or primary care providers who serve pregnant women and new mothers experiencing mental distress. (25)

#### 2) Create a Broader Maternal Care Workforce

- The roles of Certified Nurse Midwives, doulas, home health nurses, and community health workers are especially important in the context of maternity care deserts in rural areas where there is a scarcity of obstetricians.
- For moms with uncomplicated pregnancies, clinical professionals like Certified Nurse Midwives may be a more accessible alternative to non-local OB-GYN appointments. (26)
- Home visiting programs like Nurse-Family Partnership provide care and support from specially trained nurses to moms and families, starting in early pregnancy until the child's second birthday. (27)





#### 3) Making Maternal Health Data More Accessible

- To optimize our ability to quantify, understand, and prevent maternal death, the collection, review, and release of Texas maternal morbidity and mortality data must be streamlined. (26)
- Coordinated data collection approaches across entities, as well as data transparency and availability, can help us to assess and intervene on maternal morbidity and mortality effectively.
- Disaggregating data by race and ethnicity can also allow for prevention and intervention strategies that specifically address the causes of racial disparities in maternal morbidity and mortality.





Deanna M. Hoelscher, PhD, RDN, LD, CNS, FISBNPA UTHealth Houston School of Public Health Austin Campus

David Lakey, MD University of Texas System, University of Texas at Tyler Health Science Center

**Courtney Byrd-Williams, PhD** UTHealth Houston School of Public Health Austin Campus

**Robin Page, PhD, APRN, CNM** Texas A&M School of Nursing

Nagla Elerian, MS University of Texas System



Content development and research for this report were led by TX RPC Project Staff Members Kaitlin Berns, Shelby Flores-Thorpe, and Melissa Campos-Hernandez. For further information, please contact <u>TXRPCNetwork@uth.tmc.edu</u>.

**NEXT STEPS** 

Connect with our team for more information on how TX RPC can help you.

TXRPCNetwork@uth.tmc.edu



Explore our other health policy resources from public health experts on topics such as nutrition, food insecurity, mental health, and maternal and child health at **go.uth.edu/TXRPCResources** or scan the code.



### **Suggested Citation**

Berns K, Flores-Thorpe S, Campos-Hernandez M, Hoelscher DM, Lakey D, Byrd-Williams C, Page R, Elerian N. UTHealth Houston School of Public Health, Michael & Susan Dell Center for Healthy Living. March 8, 2024. Maternal & Child Health. A report of the Texas Research-to-Policy Collaboration Project.







- 1.1,000 Days. Why 1,000 Days. Accessed 12/09/2022. https://thousanddays.org/why-1000-days/
- Gluckman PD, Hanson MA, Cooper C, Thornburg KL. Effect of in utero and early-life conditions on adult health and disease. N Engl J Med. 2008 Jul 3;359(1):61-73. doi: 10.1056/NEJMra0708473. PMID: 18596274; PMCID: PMC3923653.
- 3. Garbarski D. The interplay between child and maternal health: reciprocal relationships and cumulative disadvantage during childhood and adolescence. J Health Soc Behav. 2014 Mar;55(1):91-106. doi: 10.1177/0022146513513225. PMID: 24578398; PMCID: PMC4318683.
- 4. Bavis L. '4th Trimester" Problems Can Have Long-Term Effects On A Mom's Health. Published 01/24/2019. Accessed 12/09/2022. https://www.npr.org/sections/health-shots/2019/01/24/686790727/fourth-trimester-problems-can-have-long-term-effects-on-a-moms-health
- 5. Neiger R. Long-Term Effects of Pregnancy Complications on Maternal Health: A Review. J Clin Med. 2017 Jul 27;6(8):76. doi: 10.3390/jcm6080076. PMID: 28749442; PMCID: PMC5575578.
- 6. von Schmidt auf Altenstadt JF, Hukkelhoven CW, van Roosmalen J, Bloemenkamp KW. Pre-eclampsia increases the risk of postpartum haemorrhage: a nationwide cohort study in the Netherlands. PLoS One. 2013 Dec 18;8(12):e81959. doi: 10.1371/journal.pone.0081959. PMID: 24367496; PMCID: PMC3867333.
- 7. Texas Department of State Health Services, Texas Department of Health and Human Services. Texas Maternal Mortality and Morbidity Review Committee and Department of State Health Services Joint Biennial Report 2022. Published December 2022. Accessed 12/16/2022. https://www.dshs.texas.gov/sites/default/files/legislative/2022-Reports/2022-MMMRC-DSHS-Joint-Biennial-Report.pdf
- 8. Solomon J. Closing the Coverage Gap Would Improve Black Maternal Health. Center on Budget and Policy Priorities. July 26, 2021. https://www.cbpp.org/research/health/closing-the-coverage-gap-would-improve-black-maternal-health
- 9. Hoyert DL, National Center for Health Statistics. Maternal Mortality Rates in the United States, 2021. Published March 2023. Accessed 02/23/2024. https://www.cdc.gov/nchs/data/hestat/maternal-mortality/2021/maternal-mortality-rates-2021.pdf
- 10. 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
- 11.Osterman MJK, Hamiltion BE, Martin JA, et al. Births: Final Data for 2021. National Vital Statistics Reports, Volume 72, Number 1. January 31, 2023. https://www.cdc.gov/nchs/data/nvsr/nvsr72/nvsr72-01.pdf
- 12. Sabo S, Johnson S, Washington C, et al. Births Now Outpacing Deaths in Over Half the States. United States Census Bureau. December 19, 2023. https://www.census.gov/library/stories/2023/12/state-population-estimates.html
- 13. Price S. Stop Maternal Deaths: Texas Report Reinforces TMA Legislative Priorities. Texas Medical Association. March 10, 2023. https://www.texmed.org/Template.aspx?id=61378
- 14. Howard. Bill Analysis. C.S.H.B. 1847 https://capitol.texas.gov/tlodocs/88R/analysis/html/HB01847H.htm
- 15. Texas Department of State Health Services, Texas Department of Health and Human Services. 2022/2023 Healthy Texas Mothers and Babies Data Book. https://www.dshs.texas.gov/sites/default/files/healthytexasbabies/Documents/2022%20-%202023%20Healthy%20Texas%20Mothers%20and%20Babies%20Data%20Book.pdf
- 16. Prenatal-3-Policy Impact Center. State Policy Roadmap 2023: Access to Needed Services. Accessed 02/23/2024. https://pn3policy.org/pn-3-state-policy-roadmap-2023/us/outcomes/access-to-needed-services/
- 17. Gunja MZ; Seervai S; Zephyrin L; Williams RD, II. Health and Health Care for Women of Reproductive Age: How the United States Compares with Other High-Income Countries. Published 04/05/2022. Accessed 12/11/2022. https://www.commonwealthfund.org/publications/issue-briefs/2022/apr/health-and-health-care-women-reproductive-age
- 18. Many Services Are Missing from Postpartum Visits. (2021). The American journal of nursing, 121(2), 14. https://doi.org/10.1097/01.NAJ.0000734056.15411.d9
- 19. American College of Obstetricians and Gynecologists. Optimizing Postpartum Care. Committee Opinion Number 736. May 2018. https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/05/optimizing-postpartum-care
- 20. Trost S, Beauregard J, Chandra G, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017-2019. CDC Reproductive Health. September 19, 2022. https://www.cdc.gov/reproductivehealth/maternal-mortality/erasemm/data-mmrc.html
- 21. CDC Newsroom. Four in 5 pregnancy-related deaths in the U.S. are preventable. September 19, 2022. https://www.cdc.gov/media/releases/2022/p0919-pregnancy-related-deaths.html
- 22. March of Dimes. Nowhere to Go: Maternity Care Deserts Across the U.S. (2022 Report). Published 2022. Accessed 10/21/22. https://www.marchofdimes.org/sites/default/files/2022-10/2022\_Maternity\_Care\_Report.pdf
- 23. March of Dimes maternity care deserts dashboard. Accessed 2/23/2024. https://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/march-of-dimes-maternity-care-deserts-dashboard.html
- 24. Prenatal-3-Policy Impact Center. State Policy Roadmap 2022: Group Prenatal Care. Accessed 12/11/2022. https://pn3policy.org/pn-3-state-policy-roadmap-2022/us/group-prenatal-care/
- 25. Texas Child Mental Health Care Consortium. Perinatal Psychiatry Access Network (PeriPAN). Accessed 12/09/2022. https://tcmhcc.utsystem.edu/peripan/
- 26. White House Blueprint for Addressing the Maternal Health Crisis. Published June 2022. Accessed 12/09/2022. https://www.whitehouse.gov/wp-content/uploads/2022/06/Maternal-Health-Blueprint.pdf
- 27. Nurse-Family Partnership. Overview: General Information. Published 2022. Accessed 01/12/2023. https://www.nursefamilypartnership.org/wp-content/uploads/2022/03/Nurse-Family-Partnership-Overview-1.pdf