

# WHERE YOU LIVE MATTERS: MATERNITY CARE IN NORTH DAKOTA

## INTRODUCTION

With over 3.5 million births in the United States annually, and rising rates of maternal mortality and morbidity, there is ample opportunity to improve maternal outcomes across the country.<sup>1</sup> More than 2 million women of childbearing age live in maternity care deserts, areas without access to birthing facilities or maternity care providers. Access to maternity care is essential for preventing poor health outcomes and eliminating health disparities. This report expands on the 2022 Nowhere to Go: Maternity Care Deserts Across the U.S. report<sup>2</sup> by taking a deeper dive into state level data and examining additional barriers that impact access to care. This data can be used to inform policies and practice recommendations in each state.

This report presents data on several important factors: levels of maternity care access and maternity care deserts by county; distance to birthing hospitals; availability of family planning services; community level factors associated with prenatal care usage as well as the burden and consequences of chronic health conditions across the state. While not an exhaustive list, each of these topics contribute to the complexity of maternity care access in each state. Working to improve access to maternity care by bringing awareness to maternity care deserts and other factors that limit access is one way in which March of Dimes strives to reduce preventable maternal mortality and morbidity for all pregnant people.

## KEY FINDINGS

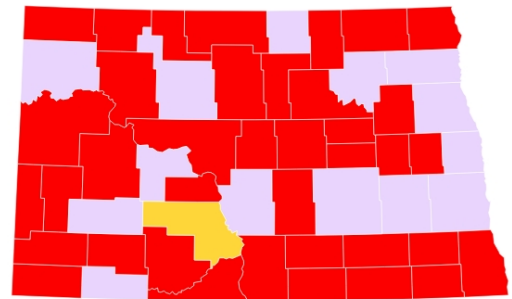
- In North Dakota, 71.7 percent of counties are defined as maternity care deserts compared to 32.6 percent in the U.S.
- 43.8 percent of women had no birthing hospital within 30 minutes compared to 9.7 percent in the U.S.
- Overall, women in North Dakota have a very high vulnerability to adverse outcomes due to the availability of reproductive healthcare services.
- 13.7 percent of birthing people received no or inadequate prenatal care, less than the U.S. rate of 14.8 percent.
- Women with chronic health conditions have a 62 percent increased likelihood of preterm birth compared to women with none.

## ACCESS TO MATERNITY CARE IN NORTH DAKOTA

Access to care during pregnancy and around the time of birth is not consistently available across the country. Hospital closures and a shortage of providers are driving changes in maternity care access, especially within rural areas and among Black, Indigenous, and people of color (BIPOC).<sup>3</sup> The level of maternity care access within each county is classified across North Dakota by the availability of birthing facilities, maternity care providers, and the percent of uninsured women (see table). The map shows that in North Dakota, 71.7 percent of counties are defined as maternity care deserts compared to 32.6 percent of counties in the U.S. overall.

## FINDINGS

- In North Dakota, there was a 12.5% increase in the number of birthing hospitals between 2020 and 2019.
- In North Dakota, there were 1,957 babies born in maternity care deserts, 19.4% of all births.
- 45.3% of babies were born to women who live in rural counties, while 26.9% of maternity care providers practice in rural counties in North Dakota.



## DEFINITIONS OF MATERNITY CARE DESERT AND LEVEL OF MATERNITY CARE ACCESS

Definitions	Maternity care deserts	Low access	Moderate access	Full access*
<b>Hospitals and birth centers offering obstetric care</b>	zero	<2	<2	≥2
<b>Obstetric providers (obstetrician, family physician<sup>†</sup>, CNM/CM per 10,000 births)</b>	zero	<60	<60	≥60
<b>Proportion of women 18-64 without health insurance</b>	any	≥10%	<10%	any



**Sources:** U.S. Health Resources and Services Administration (HRSA), Area Health Resources Files, 2022; American Board of Family Medicine, 2017-2020; National Center for Health Statistics, 2021 final natality data.

**Note:** CNM/CM = certified nurse midwives/certified midwives. \*A county is full access if it meets one or more of the criteria. <sup>†</sup>Includes family physicians who provide obstetric care.

## WHERE YOU LIVE MATTERS: MATERNITY CARE DESERTS AND THE CRISIS OF ACCESS AND EQUITY

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# NORTH DAKOTA

## DISTANCE TO MATERNITY CARE

The farther a woman travels to receive maternity care, the greater the risk of maternal morbidity and adverse infant outcomes, such as stillbirth and NICU admission.<sup>4,5</sup> Furthermore, longer travel distances to care can cause financial strain on families and increased prenatal stress and anxiety.<sup>6</sup> The distance a woman must travel to access care becomes a critical factor during pregnancy, at the time of birth, and in the case of emergencies. Nationwide closures of birthing hospitals have contributed to increased distance and travel time to care, especially in rural areas.<sup>6</sup>

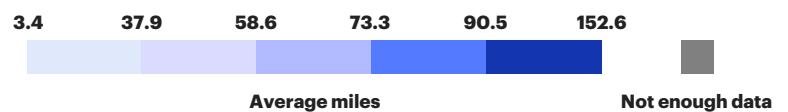
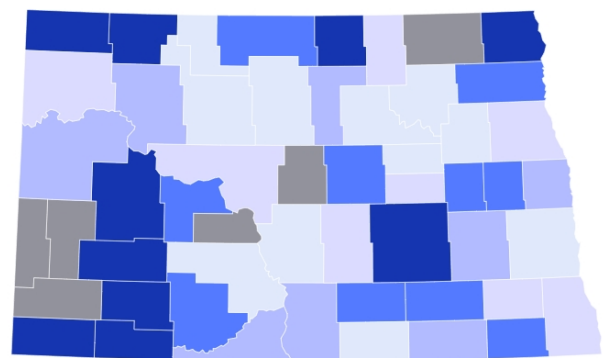
Mapping software was utilized to calculate distance, in miles and minutes, under normal traffic conditions and using real-world travel routes. The map indicates the average distance to the closest birthing hospital throughout North Dakota. Commonly used thresholds of 30- and 60-minute driving times were applied to measure the percent of birthing people with timely access to care.<sup>4</sup> This information can help identify areas where resources are needed to improve access to care. Overall, in the U.S. women travel 9.7 miles to their nearest birthing hospital.

### FINDINGS

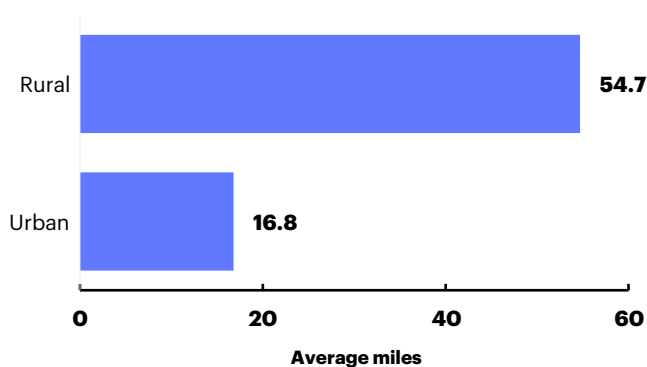
- In North Dakota, women travel 32.4 miles and 35.1 minutes, on average, to their nearest birthing hospital.
- Women living in counties with the highest travel times (top 20 percent) could travel up to 152.6 miles and 144.7 minutes, on average, to reach their nearest birthing hospital.
- Under normal traffic conditions, 29.8% of women live over 60 minutes from their nearest birthing hospital compared to 1.0% in the U.S.
- 43.8% of women in North Dakota had no birthing hospital within 30 minutes.
- In rural areas across North Dakota, 71.3% of women live over 30 minutes from a birthing hospital compared to 24.8% of women living in urban areas.
- Women living in maternity care deserts traveled 2.4 times farther than women living in areas with full access to maternity care in North Dakota.

*On average, women in North Dakota travel 32.4 miles to the nearest birthing hospital.*

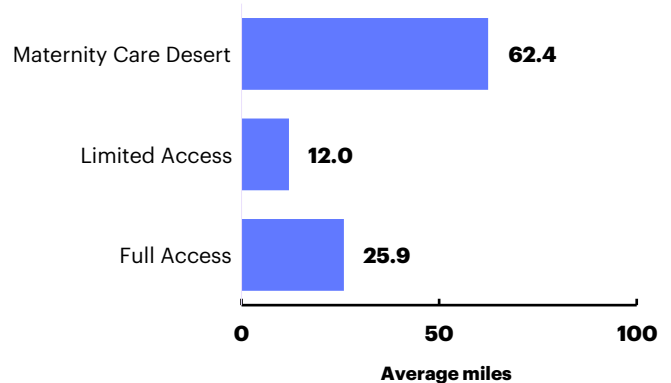
### DISTANCE TO BIRTHING HOSPITAL BY COUNTY



### DISTANCE TO CARE BY RURALITY



### DISTANCE TO CARE BY MATERNITY CARE ACCESS



**Sources:** American Hospital Association, 2021; American Board of Family Medicine, 2017-2020; U.S. Health Resources and Services Administration (HRSA), Area Health Resources Files, 2022.

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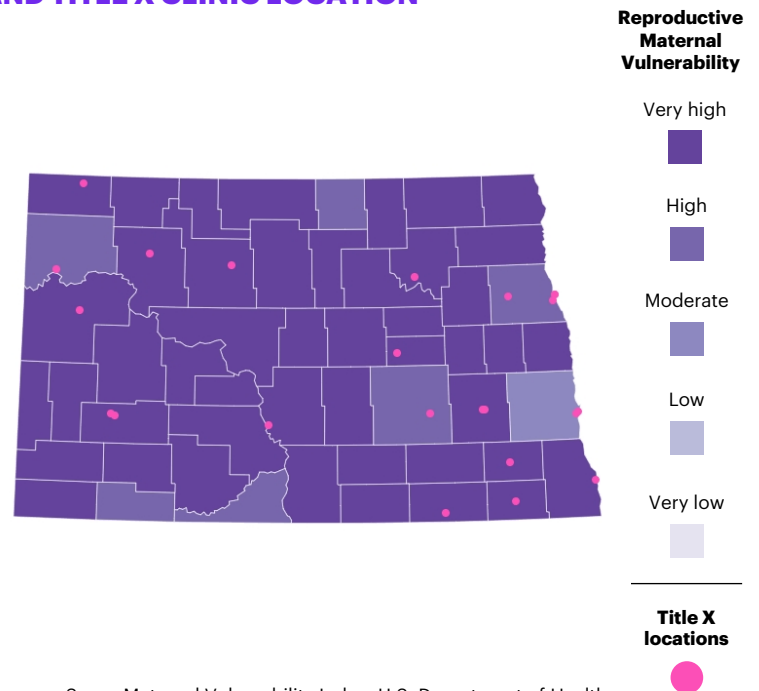
## AVAILABILITY OF FAMILY PLANNING SERVICES

Access to family planning services allows for people to achieve their goals around having children, including the timing of and spacing between pregnancies.<sup>7</sup> An unexpected pregnancy or too little time between pregnancies can lead to serious health consequences, including preterm birth, depression, and anxiety.<sup>8,9</sup> Providing access to affordable contraceptives is a strategy to help people attain their family planning goals.<sup>10</sup> Title X clinics are federally funded healthcare sites that provide low-cost reproductive healthcare services including contraceptives, wellness exams, and breast and cervical cancer screenings.<sup>11</sup> The map displays Title X locations and areas where women are vulnerable to poor outcomes due to lack of access to reproductive health services. County level risk data are derived from Surgo's U.S. Maternal Vulnerability Index (MVI), where a darker color indicates greater vulnerability.<sup>12</sup> Overall, women in North Dakota have a very high vulnerability to adverse outcomes due to the availability of reproductive healthcare services.

### FINDINGS

- There are 13.4 Title X clinics per 100,000 women in North Dakota compared to 5.3 per 100,000 in the U.S. overall.
- Women living in 98.1% of counties in North Dakota have a very high or high vulnerability to adverse outcomes.
- On average, people living in maternity care deserts in North Dakota, travel 4.4 times farther to reach their nearest Title X clinic compared to people living in full access counties.

## REPRODUCTIVE MATERNAL VULNERABILITY AND TITLE X CLINIC LOCATION



**Sources:** Surgo Maternal Vulnerability Index; U.S. Department of Health & Human Services, Office of Population Affairs. Title X Family Planning Directory (March 2023); United States Census Bureau. "S1301: Fertility." American Community Survey. 2017–2021. Web. 1 Nov 2022.

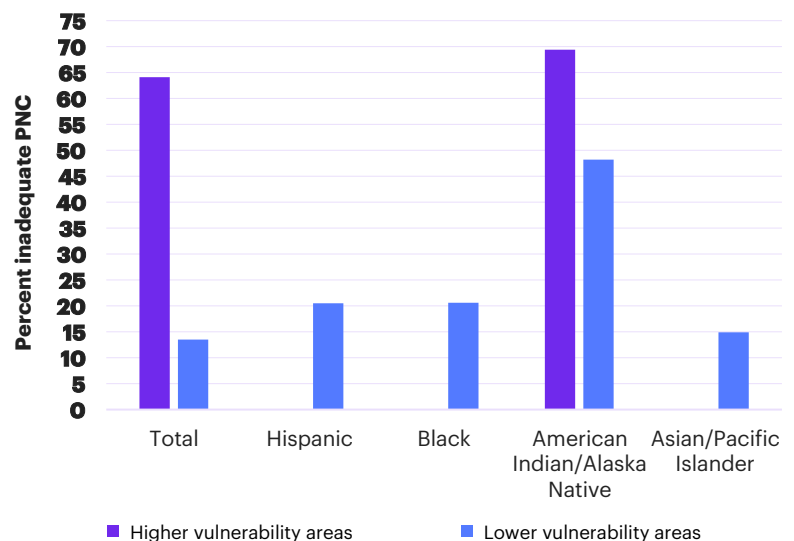
## DISPARITIES IN PRENATAL CARE

Early and regular prenatal care (PNC) is an important strategy for reducing the risk of pregnancy complications and adverse birth outcomes.<sup>13</sup> Historically, BIPOC have lower rates of adequate PNC and may be less likely to receive services such as important health screenings and appropriate monitoring of baby's growth.<sup>14,15</sup> Environmental factors, including crime rates, access to transportation and housing conditions create barriers to care that can worsen the disparity in PNC usage among BIPOC.<sup>16</sup> The MVI defines areas where women are vulnerable to poor outcomes due to the physical environment. The impact of environmental factors on PNC usage was assessed by examining the percentage of women receiving inadequate PNC in areas with higher and lower vulnerability. In North Dakota, 13.7 percent of women received inadequate PNC compared to 14.8 percent in the U.S.

### FINDINGS

- 16.5% of BIPOC did not receive PNC in areas of high environmental vulnerability.
- Among BIPOC, those living in areas of high environmental vulnerability have a 417% increased likelihood of inadequate PNC when compared to those living in areas of low environmental vulnerability.
- American Indian/Alaska Native women living in areas of high environmental vulnerability are 1.4 times more likely to receive inadequate PNC compared to those in areas of low environmental vulnerability.

## INADEQUATE PRENATAL CARE BY RACE/ETHNICITY AND ENVIRONMENTAL VULNERABILITY



**Sources:** National Center for Health Statistics, 2019–2021 final natality data; Surgo Maternal Vulnerability Index.

**Note:** Inadequate PNC is defined as no prenatal care or care that began during or after the fifth month of pregnancy or that included less than half of the appropriate number of visits for the infant's gestational age. Missing groups are suppressed.

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## CHRONIC HEALTH CONDITIONS AND PRETERM BIRTH

Having a chronic health condition before pregnancy increases the risk of pregnancy and postpartum complications. Preterm birth (PTB), a delivery before 37 weeks gestation, is one example of a complication that can lead to serious health impacts. The burden of chronic health conditions among birthing people is increasing across the U.S.<sup>17,18</sup> Access to healthcare before, during, and after pregnancy is important for appropriate management of chronic health conditions. At the time of birth, women with chronic conditions and their babies may need access to higher-level care, such as specialized providers, hospitals with the ability to perform a Cesarean birth, or hospitals with NICUs. Examining the chronic health burden (CHB) across North Dakota and its relationship to adverse outcomes provides information needed to make important changes that can result in targeted resource allocation, prevention, and appropriate disease management.

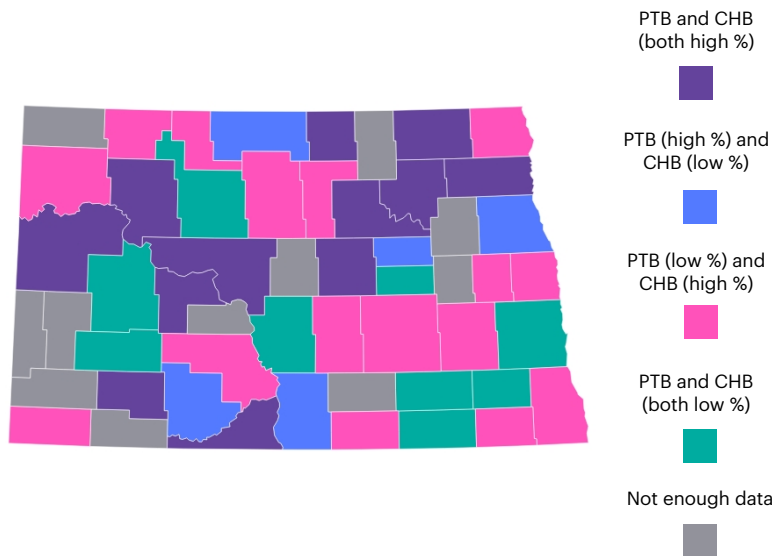
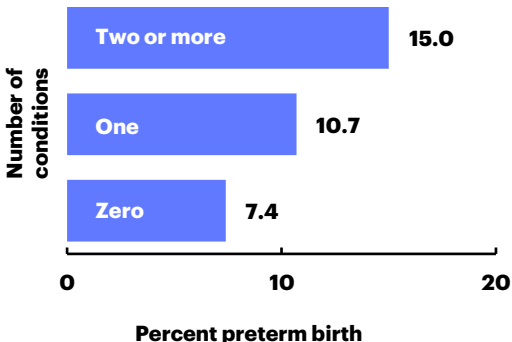
The percent of birthing people with one or more chronic conditions was calculated for each county in North Dakota and overall. The following conditions were included due to their availability in birth record data and established association with PTB: pre-pregnancy hypertension and diabetes, smoking, and being underweight or obese before pregnancy. The map describes the county level CHB in relation to the PTB rate. Areas shaded in purple have both a high CHB, greater than the overall state percent, and a high rate of PTB, defined as greater than the national target of 9.4 percent.<sup>19</sup> In North Dakota, the PTB rate was 9.6 percent, compared to 10.5 percent in the U.S. overall in 2021.

### FINDINGS

- In North Dakota, 44.2% of women had one or more chronic health conditions compared to 37.8% in the U.S. overall.
- Women with one or more chronic health conditions have a 62% increased likelihood of having a preterm birth compared to those without any chronic health conditions.
- 24.5% of counties in North Dakota have a high burden of chronic health conditions and a high rate of preterm birth.

### CHRONIC HEALTH BURDEN (CHB) AND PRETERM BIRTH (PTB) BY COUNTY

### PRETERM BIRTH BY NUMBER OF CHRONIC HEALTH CONDITIONS



**Source:** National Center for Health Statistics, 2017–2021 final natality data.

**Note:** The burden of chronic health conditions is the percent of birthing people in each county with one or more chronic conditions. Data for counties with less than 10 preterm births or women with chronic health conditions are excluded from map.

### SUMMARY

All women deserve healthcare which is safe, effective, timely, efficient and equitable. Consistent and equitable access to maternity care helps women maintain optimal health as well as reduce the risk of experiencing complications during pregnancy and the postpartum period. Several factors influence maternity care access for women across the U.S. By assessing distance to care and the availability of maternity care providers, hospitals and family planning services, this report provides insight into several physical components that affect a person's ability to receive care. In addition, examining community level factors associated with access to care and identifying vulnerable populations provides greater context around barriers to receiving appropriate care. Together this information can lead decision makers, public health professionals, clinicians and researchers to advocate for policies and resources that increase maternity care access across each state.

By addressing these factors, states may move closer to eliminating pregnancy-related deaths and complications. Telehealth, through various platforms, equips maternal health providers with the tools to better facilitate care before, during and after pregnancy and has been shown to not only increase access but also improves patient engagement and treatment.<sup>20</sup> March of Dimes fully supports Congress, governmental regulating agencies and states to act and make telehealth provisions balanced and permanent. Evidence-based telehealth services and other innovative solutions are explored in greater depth on page 5.

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# NORTH DAKOTA

## POLICY SOLUTIONS AND ACTIONS

March of Dimes has long supported policies that improve access to maternity care, including Medicaid expansion and extension, improved integration of the midwifery model of care, reimbursement for doula care, and increasing the availability of telehealth services across a range of healthcare specialties. Telehealth is healthcare delivered using technology to replace or enhance in-person care and can save lives by providing high-quality care for pregnant and postpartum people.<sup>21</sup> Women who are underserved, vulnerable to poor health outcomes, and have limited access to high-risk care can greatly benefit from telehealth.<sup>21</sup>

To address the limited access to maternity care in the U.S., states must adopt and support telehealth and other innovative practices to expand access and provide more options for healthcare delivery. The current state of telehealth policies and innovative solutions in North Dakota aimed at improving maternal health outcomes is explored in this report. By highlighting innovative solutions implemented across states, policymakers and healthcare professionals can identify policies and programs that can improve health for pregnant people in North Dakota and ensure they receive the support and care needed before, during, and after pregnancy.



### TELEHEALTH LAW

Due to the COVID-19 Public Health Emergency (PHE), states expanded access to telehealth services. While many of the policies increased access to telehealth for maternity care services temporarily, many states permanently expanded telehealth services. This policy measure identifies whether North Dakota has passed laws to permanently provide Medicaid telehealth coverage for maternity care services.<sup>22,23</sup>



### TELEHEALTH COVERAGE

Medicaid telehealth policies vary by state. States may cover all forms of telehealth services or restrict certain forms of telehealth services.<sup>22</sup> This policy measure identifies whether North Dakota provides Medicaid reimbursement of the following telehealth services:

✓ Live video ✓ Remote patient monitoring ✓ Audio-only<sup>22</sup>



Meets recommendations



Progressing toward recommendations



Needs improvement

## POLICY AND PROGRAM INNOVATION

- Aiming to train the next generation of Indigenous health research, program, and policy leaders, the University of North Dakota launched the country's first Ph.D. program in Indigenous health—the latest in a long line of efforts to increase American Indian representation in healthcare. Indians Into Medicine (INMED) program eventually expanded to physical therapy and occupational therapy and has served as a model for similar initiatives at the University of North Dakota's nursing and psychology graduate programs. Through INMED, the University of North Dakota's medical school has established itself as a leader in American Indian representation. Increasing the number of Native doctors could help alleviate healthcare provider shortages, as Native doctors are more likely than their peers to serve Native patients.<sup>24</sup>
- North Dakota Medicaid covers maternal depression screening as a separate service when performed in conjunction with a Health Tracks (EPSDT) screening or any other pediatric visit, and is considered a risk assessment for the child. Up to three maternal depression screenings are allowed for a child under the age of one. Providers are instructed to bill only when one of the standardized screening tools is used and to bill using the child's North Dakota Medicaid ID Number.<sup>25</sup>

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## REFERENCES

- <sup>1</sup> Osterman MJ, Hamilton BE, Martin JA, Driscoll AK, Valenzuela CP. Births: Final Data for 2020. *National Vital Statistics Reports*. 2022;70(17). Accessed April 5, 2023. <https://www.cdc.gov/nchs/products/index.htm>.
- <sup>2</sup> Brigance C, Ripley L, Jones E, et al. *Nowhere to Go: Maternity Care Deserts Across the U.S. (Report No. 3)*. March of Dimes. 2022. Accessed April 5, 2023. <https://www.marchofdimes.org/research/maternity-care-deserts-report.aspx>
- <sup>3</sup> U.S. Government Accountability Office (GAO). *Availability of Hospital-Based Obstetric Care in Rural Areas*. October 2022. Accessed April 5, 2023. <https://www.gao.gov/assets/gao-23-105515.pdf>
- <sup>4</sup> Roa L, Uribe-Leitz T, Fallah PN, et al. Travel Time to Access Obstetric and Neonatal Care in the United States. *Obstetrics and Gynecology*. 2020;136(3):610-612. doi:10.1097/AOG.0000000000004053
- <sup>5</sup> Minion SC, Krans EE, Brooks MM, Mendez DD, Haggerty CL. Association of Driving Distance to Maternity Hospitals and Maternal and Perinatal Outcomes. *Obstetrics and Gynecology*. 2022;140(5):812-819. doi:10.1097/AOG.0000000000004960
- <sup>6</sup> Kozhimannil KB, Hung P, Henning-Smith C, Casey MM, Prasad S. Association Between Loss of Hospital-Based Obstetric Services and Birth Outcomes in Rural Counties in the United States. *JAMA*. 2018;319(12):1239. doi:10.1001/JAMA.2018.1830
- <sup>7</sup> World Health Organization (WHO). Family planning/contraception methods. Published November 9, 2020. Accessed April 9, 2023. <https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception>
- <sup>8</sup> Kaiser Family Foundation. The U.S. Government and International Family Planning & Reproductive Health Efforts. Published November 11, 2021. Accessed April 3, 2023. <https://www.kff.org/global-health-policy/fact-sheet/the-u-s-government-and-international-family-planning-reproductive-health-efforts/>
- <sup>9</sup> Napili A. *Title X Family Planning Program*. Published June 2022. Accessed April 3, 2023. [https://crsreports.congress.gov/product/pdf/IF/IF10051#:text=What%20Is%20the%20Federal%20Funding,Rescue%20Plan%20Act%20\(ARPA%2C%20P.L.](https://crsreports.congress.gov/product/pdf/IF/IF10051#:text=What%20Is%20the%20Federal%20Funding,Rescue%20Plan%20Act%20(ARPA%2C%20P.L.)
- <sup>10</sup> Centers for Disease Control and Prevention (CDC). Premature Birth. Published November 1, 2022. Accessed April 3, 2023. <https://www.cdc.gov/reproductivehealth/features/premature-birth/index.html>
- <sup>11</sup> U.S. Department of Health & Human Services (HHS), Office of Population Affairs. Title X Service Grants. Accessed April 3, 2023. <https://opa.hhs.gov/grant-programs/title-x-service-grants>
- <sup>12</sup> Valerio VC, Downey J, Sgaier SK, Callaghan WM, Hammer B, Smittenaar P. Black-White Disparities in Maternal Vulnerability and Adverse Pregnancy Outcomes: an Ecological Population Study in the United States, 2014-2018. Accessed April 3, 2023. *The Lancet Regional Health*. <https://www.thelancet.com/journals/lanam/article/PIIS2667-193X%2823%2900030-3/fulltext>
- <sup>13</sup> Alexander GR, Kotelchuck M. Assessing the Role and Effectiveness of Prenatal Care: History, Challenges, and Directions for Future Research. *Public Health Reports*. 2001;116(4):306. doi:10.1016/S0033-3549(04)50052-3
- <sup>14</sup> Hill L, Artiga S, Ranji U. Racial Disparities in Maternal and Infant Health: Current Status and Efforts to Address Them. Kaiser Family Foundation. Published November 1, 2022. Accessed April 3, 2023. <https://www.kff.org/racial-equity-and-health-policy/issue-brief/racial-disparities-in-maternal-and-infant-health-current-status-and-efforts-to-address-them/>
- <sup>15</sup> Howell EA. Reducing Disparities in Severe Maternal Morbidity and Mortality. *Clin Obstet Gynecol*. 2018;61(2):387. doi:10.1097/GRF.0000000000000349
- <sup>16</sup> Bryant AS, Worjohol A, Caughey AB, Washington AE. Racial/Ethnic Disparities in Obstetric Outcomes and Care: Prevalence and Determinants. *Am J Obstet Gynecol*. 2010;202(4):335-343. doi:10.1016/j.AJOG.2009.10.864
- <sup>17</sup> Blue Cross Blue Shield, The Health of America Report. *Trends in Pregnancy and Childbirth Complications in the U.S. 2020*. Accessed April 3, 2023. [https://www.bcbs.com/sites/default/files/file-attachments/health-of-america-report/HoA\\_Maternal\\_Health.pdf](https://www.bcbs.com/sites/default/files/file-attachments/health-of-america-report/HoA_Maternal_Health.pdf)
- <sup>18</sup> Ananth CV, Duzyj CM, Yadava S, Schwebel M, Tita ATN, Joseph KS. Changes in the Prevalence of Chronic Hypertension in Pregnancy, United States, 1970 to 2010. *Hypertension*. 2019;74(5): 1089-1095. doi:10.1161/HYPERTENSIONAHA.119.12968
- <sup>19</sup> Healthy People 2030. Reduce preterm births — MICH-07. Office of Disease Prevention and Health Promotion, U.S. Dept. of Health and Human Services. Accessed April 3, 2023. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/reduce-preterm-births-mich-07>
- <sup>20</sup> Brown HL, DeNicola N. Telehealth in Maternity Care. *Obstet Gynecol Clin North Am*. 2020;47 (3):497-502. doi:10.1016/j.ogc.2020.05.003
- <sup>21</sup> Health Resources & Services Administration (HRSA). Telehealth and High Risk Pregnancy. Published April 12, 2022. Accessed April 26, 2023. <https://telehealth.hhs.gov/providers/best-practice-guides/telehealth-for-maternal-health-services/telehealth-and-high-risk-pregnancy>
- <sup>22</sup> Center for Connected Health Policy (CCHP). State Telehealth Laws and Reimbursement Policies- Fall 2020 Summary Chart of Key Telehealth Policy Areas. Published October 2022. Accessed April 26, 2023. [https://www.cchpca.org/2022/10/Fall2022\\_SummaryChart1.pdf](https://www.cchpca.org/2022/10/Fall2022_SummaryChart1.pdf)
- <sup>23</sup> North Dakota Health & Human Services. North Dakota Family Planning Program Policy and Procedure Manual 2.7.13 Telemedicine Services.; 2022. Accessed May 4, 2023. <https://www.hhs.nd.gov/sites/www/files/documents/DHS%20Legacy/2.7.13%20Telemedicine%20Services.pdf>
- <sup>24</sup> Kwon S. American Indians' Growing Presence in the Health Professions. Health Affairs. February 2021. Accessed May 9, 2023. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.02289>.
- <sup>25</sup> Center for Children and Families. Maternal Depression Screening. Published May 29, 2015. Accessed May 9, 2023. <https://ccf.georgetown.edu/wp-content/uploads/pdfs/maternal-depression-screen.pdf>.

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