

# U.S. Maternal Mortality Resource Pack

2024

## Overview

This resource pack is intended to support teaching and learning about maternal mortality and reproductive health in the United States. This collection of resources highlights how maternal health in the U.S. falls drastically behind other high-income countries, especially for women of color, and explores the social determinants of health responsible for these disparities, including healthcare quality, issues of birth equity, and other factors related to race and ethnicity.

The resources in this collection were selected for their diversity, quality, and timeliness. We specifically curated publications, data portals, interactives, and graphics that allow users to explore the many facets associated with maternal mortality and reproductive health in the United States. Most of these resources are accessible for free and updated regularly.

These resources may be useful to educators as they develop lesson plans, activities, or assignments focusing on maternal health and mortality in the United States. Learners could apply analytical skills through the exploration of data portals and interactives, use articles as case examples for discussion, or focus on specific issues related to maternal mortality in their own communities.

The [Global Health Education and Learning Incubator at Harvard University](#) supports interdisciplinary education about world health through the production, curation, and dissemination of educational public goods.

This resource pack includes:

- [At-A-Glance](#)
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[Last updated: February 2024]

## Selected Resources

\*indicates resource listed in GHELI's online Repository

### AT-A-GLANCE

**\* Report. Losing More Ground: Revisiting Young Women's Well-Being Across Generations in the United States**

Srygley S et al. Losing More Ground: Revisiting Young Women's Well-Being Across Generations in the United States. Population Reference Bureau 2023; 77(1). <https://www.prb.org/resources/losing-more-ground>.

**\* Article. Measuring U.S. Maternal Mortality**

Declercq E, Thoma M. Measuring US Maternal Mortality. JAMA 2023; 330(18):1731–1732. DOI: <https://doi.org/10.1001/jama.2023.19945>.

**Brief. Maternal Mortality Rates in the United States, 2021**

Hoyert DL. Maternal Mortality Rates in the United States, 2021. NCHS Health E-Stats 2023. DOI: <https://dx.doi.org/10.15620/cdc:124678>.

**Web Portal. State Legislation Tracker: Major Developments in Sexual and Reproductive Health**

State Legislation Tracker: Major Developments in Sexual and Reproductive Health. Guttmacher Institute 2023. <https://www.guttmacher.org/state-policy>.

**Article. The U.S. Maternal Mortality Crisis Continues to Worsen: An International Comparison**

Gunja MZ, Gumas ED, Williams II, RD. The U.S. Maternal Mortality Crisis Continues to Worsen: An International Comparison. The Commonwealth Fund 2022. <https://www.commonwealthfund.org/blog/2022/us-maternal-mortality-crisis-continues-worsen-international-comparison>.

**\* Report. Racial Disparities in Maternal Mortality**

Racial Disparities in Maternal Mortality. U.S. Commission on Civil Rights 2021. <https://www.usccr.gov/reports/2021/racial-disparities-maternal-health>.

**\* Article. Social and Structural Determinants of Health Inequities in Maternal Health**

Crear-Perry J et al. Social and Structural Determinants of Health Inequities in Maternal Health. Journal of Women's Health 2021; 30(2): 230-235. DOI: <https://doi.org/10.1089/jwh.2020.8882>.

**Brief. The COVID-19 Pandemic is Exacerbating a Human Rights Crisis in U.S. Maternal Health**

The COVID-19 Pandemic is Exacerbating a Human Rights Crisis in U.S. Maternal Health. Center for Reproductive Rights 2021. <https://reproductiverights.org/wp-content/uploads/2020/12/The-COVID-19-Pandemic-is-Exacerbating-a-Human-Rights-Crisis-in-Maternal-Health.pdf>.

**\* Brief. Maternal Mortality in the U.S.**

Maternal Mortality in the United States: A Primer. The Commonwealth Fund 2020. <https://www.commonwealthfund.org/publications/issue-brief-report/2020/dec/maternal-mortality-united-states-primer>.

**Brief. Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries**

Tikkanen R et al. Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries. The Commonwealth Fund 2020. <https://www.commonwealthfund.org/publications/issue-briefs/2020/nov/maternal-mortality-maternity-care-us-compared-10-countries>.

**Report. Building U.S. Capacity to Review and Prevent Maternal Deaths: Report From Nine Maternal Mortality Review Committees**

Building U.S. Capacity to Review and Prevent Maternal Deaths: Report From Nine Maternal Mortality Review Committees. Review to Action 2018. [http://reviewtoaction.org/Report\\_from\\_Nine\\_MMRCs](http://reviewtoaction.org/Report_from_Nine_MMRCs).

**\* Data Portal. The U.S. Maternal Vulnerability Index**

The U.S. Maternal Vulnerability Index. Surgo Ventures. <https://mvi.surgoventures.org>.

## Web Portal. Giving Birth in America

Giving Birth in America. Every Mother Counts. <https://everymothercounts.org/giving-birth-in-america>.

## Data Portal. Women's Health

Women's Health. Henry J. Kaiser Family Foundation. <https://www.kff.org/state-category/womens-health>.

## Data Portal. America's Health Rankings

America's Health Rankings. United Health Foundation. <https://www.americashealthrankings.org>.

## NEWS AND NARRATIVES

### News. As Abortion Laws Drive Obstetricians From Red States, Maternity Care Suffers

Stolberg SG. As Abortion Laws Drive Obstetricians From Red States, Maternity Care Suffers. The New York Times 2023; Sep 6. <https://www.nytimes.com/2023/09/06/us/politics/abortion-obstetricians-maternity-care.html>.

### Article. Why America's Black Mothers and Babies Are in a Life-or-Death Crisis

Villarosa L. Why America's Black Mothers and Babies Are in a Life-or-Death Crisis. The New York Times 2018; Apr 11. <https://www.nytimes.com/2018/04/11/magazine/black-mothers-babies-death-maternal-mortality.html>.

## SOCIAL DETERMINANTS

### \* Article. Social and Structural Determinants of Health Inequities in Maternal Health

Crear-Perry J et al. Social and Structural Determinants of Health Inequities in Maternal Health. Journal of Women's Health 2021; 30(2): 230-235. DOI: <https://doi.org/10.1089/jwh.2020.8882>.

### Article. More Than Shelter: Housing for Urban Maternal and Infant Health

Reece J. More Than Shelter: Housing for Urban Maternal and Infant Health. International Journal of Environmental Research and Public Health 2021; 18(7): 1-17. DOI: <https://doi.org/10.3390/ijerph18073331>.

### Article. Neighborhood Racial and Economic Polarization, Hospital of Delivery, and Severe Maternal Morbidity

Janevic T, Zeitlin J, Egorova N et al. Neighborhood Racial and Economic Polarization, Hospital of Delivery, and Severe Maternal Morbidity. Health Affairs 2020; 39(5): 768-776. <https://doi.org/10.1377/hlthaff.2019.00735>.

### \* Article. Social Determinants of Pregnancy-Related Mortality and Morbidity in the United States: A Systematic Review

Wang E et al. Social Determinants of Pregnancy-Related Mortality and Morbidity in the United States: A Systematic Review. Obstetrics & Gynecology 2020; 135(4): 896-915. DOI: <https://doi.org/10.1097/aog.0000000000003762>.

### Article. Income Inequality and Racial Disparities in Pregnancy-Related Mortality in the US

Vilda D et al. Income Inequality and Racial Disparities in Pregnancy-Related Mortality in the US. Population Health 2019; 9: 1-11. DOI: <https://doi.org/10.1016/j.ssmph.2019.100477>.

### \* Data Publication. Racial/Ethnic Disparities in Pregnancy-Related Deaths – United States, 2007-2016

Petersen E et al. Racial/Ethnic Disparities in Pregnancy-Related Deaths – United States, 2007-2016. Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report 2019; 68(35): 762-765. DOI: <http://dx.doi.org/10.15585/mmwr.mm6835a3>.

## BIRTH EQUITY

### Article. Trends in State-Level Maternal Mortality by Racial and Ethnic Group in the United States

Fleszar LG et al. Trends in State-Level Maternal Mortality by Racial and Ethnic Group in the United States. JAMA 2023; 330(1): 52-61. DOI: <https://doi.org/10.1001/jama.2023.9043>.

### Article. Structural Racism and Maternal Health Among Black Women

Taylor J. Structural Racism and Maternal Health Among Black Women. The Journal of Law, Medicine and Ethics 2020; 48: 506-517. DOI: <https://doi.org/10.1177%2F1073110520958875>.

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### **Article. Maternal Mortality Among American Indian/Alaska Native Women: A Scoping Review**

Heck J et al. Maternal Mortality Among American Indian/Alaska Native Women: A Scoping Review. Journal of Women's Health 2021; 30(2): 220-229. DOI: <https://doi.org/10.1089/jwh.2020.8890>.

### **Article. Racial and Ethnic Disparities in Maternal Mortality in the United States Using Enhanced Vital Records, 2016-2017**

MacDorman M et al. Racial and Ethnic Disparities in Maternal Mortality in the United States Using Enhanced Vital Records, 2016-2017. American Journal of Public Health 2021; 111(9): 1673-1681. DOI: <https://doi.org/10.2105/AJPH.2021.306375>.

### **\* Report. Advancing Birth Justice: Community-Based Doula Models as a Standard of Care for Ending Racial Disparities**

Bey A, Brill A, Porchia-Albert C et al. Advancing Birth Justice: Community-Based Doula Models as a Standard of Care for Ending Racial Disparities. Ancient Song Doula Services, Village Birth International, Every Mother Counts 2019. <https://everymothercounts.org/wp-content/uploads/2019/03/Advancing-Birth-Justice-CBD-Models-as-Std-of-Care-3-25-19.pdf>.

### **\* Article. Nothing Protects Black Women From Dying in Pregnancy and Childbirth**

Martin N, Montagne R. Nothing Protects Black Women From Dying in Pregnancy and Childbirth. ProPublica, NPR 2017; Dec 7. <https://www.propublica.org/article/nothing-protects-black-women-from-dying-in-pregnancy-and-childbirth>.

### **\* Report. Reproductive Injustice: Racial and Gender Discrimination in U.S. Healthcare**

Reproductive Injustice: Racial and Gender Discrimination in U.S. Healthcare. Center for Reproductive Rights, National Latina Institute for Reproductive Health, SisterSong Women of Color Reproductive Justice Collective 2014. <https://reproductiverights.org/reproductive-injustice-racial-and-gender-discrimination-in-u-s-health-care>.

### **Web Portal. Working Together to Reduce Black Maternal Mortality**

Working Together to Reduce Black Maternal Mortality. Centers for Disease Control and Prevention. <https://www.cdc.gov/healthequity/features/maternal-mortality/index.html>.

## HEALTHCARE QUALITY

### **\* Report. Birth Settings in America: Outcomes, Access, and Choice**

Birth Settings in America: Outcomes, Quality, Access, and Choice. The National Academies Press 2020. DOI: <https://doi.org/10.17226/25636>.

### **Article. The Giving Voice to Mothers Study: Inequity and Mistreatment During Pregnancy and Childbirth in the United States**

Vedam S et al. The Giving Voice to Mothers Study: Inequity and Mistreatment During Pregnancy and Childbirth in the United States. Reproductive Health 2019; 16(77): 1-18. DOI: <https://doi.org/10.1186/s12978-019-0729-2>.

### **\* Article. Quality of Care and Disparities in Obstetrics**

Howell E, Zeitlin J. Quality of Care and Disparities in Obstetrics. Obstetrics and Gynecology Clinics of North America 2017; 44(1): 13-25. DOI: <https://dx.doi.org/10.1016%2Fj.ogc.2016.10.002>.

### **Article. Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites**

Hoffman K et al. Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites. Proceedings of the National Academy of Sciences of the United States of America 2016; 113(16): 4296-4301. DOI: <https://doi.org/10.1073/pnas.1516047113>.

## SEXUAL AND REPRODUCTIVE RIGHTS

### **Web Portal. State Legislation Tracker: Major Developments in Sexual and Reproductive Health**

State Legislation Tracker: Major Developments in Sexual and Reproductive Health. Guttmacher Institute 2024. <https://www.guttmacher.org/state-legislation-tracker>.

### **Web Portal. An Overview of Abortion Laws**

An Overview of Abortion Laws. Guttmacher Institute 2023. <https://www.guttmacher.org/state-policy/explore/overview-abortion-laws>.

### **Web Portal. After Roe Fell: Abortion Laws by State**

After Roe Fell: Abortion Laws by State. Center for Reproductive Rights 2023. <https://reproductiverights.org/maps/abortion-laws-by-state>.

### **Brief. The U.S. Maternal Health Divide: The Limited Maternal Health Services and Worse Outcomes of States Proposing New Abortion Restrictions**

The U.S. Maternal Health Divide: The Limited Maternal Health Services and Worse Outcomes of States Proposing New Abortion Restrictions. Commonwealth Fund 2022. <https://www.commonwealthfund.org/publications/issue-briefs/2022/dec/us-maternal-health-divide-limited-services-worse-outcomes>.

### **\* Data Interactive. How State Policies Shape Access to Abortion Coverage**

Interactive: How State Policies Shape Access to Abortion Coverage. Henry J. Kaiser Family Foundation 2023. <https://www.kff.org/womens-health-policy/issue-brief/interactive-how-state-policies-shape-access-to-abortion-coverage>.

### **Fact Sheet. U.S. Abortion Laws in Global Context**

U.S. Abortion Laws in Global Context. Center for Reproductive Rights 2022. <https://reproductiverights.org/us-abortion-laws-global-context-factsheet>.

### **\* Report. The Continuing Impacts of the COVID-19 Pandemic in the United States: Findings from the 2021 Guttmacher Survey of Reproductive Health Experiences**

Lindberg L et al. The Continuing Impacts of the COVID-19 Pandemic in the United States: Findings from the 2021 Guttmacher Survey of Reproductive Health Experiences. Guttmacher Institute 2021. <https://www.guttmacher.org/report/continuing-impacts-covid-19-pandemic-findings-2021-guttmacher-survey-reproductive-health>.

### **Article. State Abortion Policies and Maternal Death in the United States, 2015–2018**

Vila D et al. State Abortion Policies and Maternal Death in the United States, 2015–2018. American Journal of Public Health 2021; 111(9): 1696-1704. DOI: <https://doi.org/10.2105/AJPH.2021.306396>.

### **Article. Abortion Access for Incarcerated People**

Sufrin C et al. Abortion Access for Incarcerated People. Obstetrics and Gynecology 2021; 138(3): 330-337. DOI: <https://doi.org/10.1097/AOG.0000000000004497>.

### **Article. Abortion Surveillance – United States, 2018**

Kortsmitt K et al. Abortion Surveillance – United States, 2018. Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report 2020; 69(7): 1-30. DOI: <http://dx.doi.org/10.15585/mmwr.ss6907a1>.

### **\* Report. Abortion Incidence and Service Availability in the United States**

Jones R et al. Abortion Incidence and Service Availability in the United States, 2017. Guttmacher Institute 2019. DOI: <https://doi.org/10.1363/2019.30760>.

### **Data Portal. Abortion in the U.S. Dashboard**

Abortion in the U.S. Dashboard. Henry J. Kaiser Family Foundation. <https://www.kff.org/womens-health-policy/dashboard/abortion-in-the-u-s-dashboard/#related>.

### **\* Data Interactive. US Abortion Policies and Access After Roe**

US Abortion Policies and Access After Roe. Guttmacher Institute. <https://states.guttmacher.org/policies>.

# Resource Pack: U.S. Maternal Mortality

**\* Organization. Center for Reproductive Rights**

Center for Reproductive Rights. <https://www.reproductiverights.org>.

**\* Organization. Guttmacher Institute**

Guttmacher Institute. <http://www.guttmacher.org>.

## POLICIES AND RECOMMENDATIONS

**Report. Policies for Reducing Maternal Morbidity and Mortality and Enhancing Equity in Maternal Health**

Policies for Reducing Maternal Morbidity and Mortality and Enhancing Equity in Maternal Health. Commonwealth Fund 2021. <https://www.commonwealthfund.org/publications/fund-reports/2021/nov/policies-reducing-maternal-morbidity-mortality-enhancing-equity>.

**Brief. Maternal Health Policy Brief: The American Rescue Plan and the 2021 Black Maternal Health Omnibus Act**

Barnes S et al. Maternal Health Policy Brief: The American Rescue Plan and the 2021 Black Maternal Health Omnibus Act. Wilson Center 2021. <https://www.wilsoncenter.org/publication/maternal-health-policy-brief-american-rescue-plan-and-2021-black-maternal-health>.

**\* Article. Overview of U.S. Maternal Mortality Policy**

Villavicencio J et al. Overview of U.S. Maternal Mortality Policy. Clinical Therapeutics 2020; 42(3): 408-418. DOI: <https://doi.org/10.1016/j.clinthera.2020.01.015>.

**Article. Preventing Maternal Mortality in the United States: Lessons From California and Policy Recommendations**

Nichols C, Cohen A. Preventing Maternal Mortality in the United States: Lessons From California and Policy Recommendations. Journal of Public Health Policy 2020; 42: 127-144. DOI: <https://doi.org/10.1057/s41271-020-00264-9>.

**Web Portal. Four State Strategies to Employ Doulas to Improve Maternal Health and Birth Outcomes in Medicaid**

Platt T, Kaye N. Four State Strategies to Employ Doulas to Improve Maternal Health and Birth Outcomes in Medicaid. National Academy for State Health Policy 2020. <https://www.nashp.org/four-state-strategies-to-employ-doulas-to-improve-maternal-health-and-birth-outcomes-in-medicaid>.

**Web Portal. State Policies to Improve Maternal Health Outcomes**

State Policies to Improve Maternal Health Outcomes. The Commonwealth Fund 2023. <https://www.commonwealthfund.org/publications/maps-and-interactives/state-policies-improve-perinatal-health-outcomes>.

## FACT SHEETS

**Fact Sheet. Racial Disparities in Maternal and Infant Health: Current Status and Efforts to Address Them**

Hill L, Artiga S, Ranji U. Racial Disparities in Maternal and Infant Health: Current Status and Efforts to Address Them. Henry J. Kaiser Family Foundation 2022. <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>.

**\* Fact Sheet. Adolescent Sexual and Reproductive Health in the United States**

Adolescent Sexual and Reproductive Health in the United States. Guttmacher Institute 2019. <https://www.guttmacher.org/fact-sheet/american-teens-sexual-and-reproductive-health>.



## GLOBAL CONTEXT

### \* Report. World Population Data Sheet 2023

2023 World Population Data Sheet. Population Reference Bureau 2023. <https://2023-wpds.prb.org>.

### \* Data Publication. Trends in Maternal Mortality (2000-2020)

Trends in Maternal Mortality (2000-2020). United Nations Population Fund, World Health Organization, United Nation's Children Fund, The World Bank Group, United Nations Population Division 2023.

<https://www.who.int/publications/i/item/9789240068759>.

### \* Report. State of World Population 2023 – 8 Billion Lives, Infinite Possibilities: The Case for Rights and Choices

State of World Population 2023– 8 Billion Lives, Infinite Possibilities: The Case for Rights and Choices. United Nations Population Fund 2023. <https://www.unfpa.org/swp2023>.

### \* Fact Sheet. The U.S. Government and International Family Planning & Reproductive Health: Statutory Requirements and Policies

The U.S. Government and International Family Planning & Reproductive Health: Statutory Requirements and Policies.

Fact Sheet. Henry J. Kaiser Family Foundation 2023. <https://www.kff.org/global-health-policy/fact-sheet/the-u-s-government-and-international-family-planning-reproductive-health-statutory-requirements-and-policies>.

### \* Report. Family Planning 2020: The Arc of Progress

FP2020: The Arc of Progress. Family Planning 2020 2021. <http://progress.familyplanning2020.org>.

### \* Report. The State of the World's Midwifery

The State of the World's Midwifery 2021. United Nations Population Fund 2021.

<https://www.unfpa.org/publications/sowmy-2021>.

### \* Data Portal. Maternal Health Atlas

Maternal Health Atlas. Institute for Health Metrics and Evaluation 2019. <http://www.healthdata.org/data-visualization/maternal-health-atlas>.

### \* Report. Accelerate Progress—Sexual and Reproductive Health and Rights for All: Report of the Guttmacher–Lancet Commission

Starrs AM et al. Accelerate Progress—Sexual and Reproductive Health and Rights for All: Report of the Guttmacher–Lancet Commission. The Lancet 2018; 391(10140): 2642–2692. DOI: [https://doi.org/10.1016/S0140-6736\(18\)30293-9](https://doi.org/10.1016/S0140-6736(18)30293-9).

### Article Series. Maternal Health 2016

The Lancet 2016. <http://www.thelancet.com/series/maternal-health-2016>.

#### Article. Diversity and Divergence: The Dynamic Burden of Poor Maternal Health

Graham W et al. Diversity and Divergence: The Dynamic Burden of Poor Maternal Health. The Lancet 2016. DOI:

10.1016/S0140-6736(16)31533-1. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)31533-1/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31533-1/fulltext).

#### Article. Beyond Too Little, Too Late and Too Much, Too Soon: A Pathway Towards Evidence-Based, Respectful Maternity Care Worldwide

Miller S et al. Beyond Too Little, Too Late and Too Much, Too Soon: A Pathway Towards Evidence-Based, Respectful

Maternity Care Worldwide. The Lancet 2016. DOI: 10.1016/S0140-6736(16)31472-6. DOI: [https://doi.org/10.1016/S0140-6736\(16\)31472-6](https://doi.org/10.1016/S0140-6736(16)31472-6).

#### Article. The Scale, Scope, Coverage, and Capability of Childbirth Care

Campbell OMR et al. The Scale, Scope, Coverage, and Capability of Childbirth Care. The Lancet 2016.

DOI: 10.1016/S0140-6736(16)31528-8. DOI: [https://doi.org/10.1016/S0140-6736\(16\)31528-8](https://doi.org/10.1016/S0140-6736(16)31528-8).

#### Article. Drivers of Maternity Care in High-Income Countries: Can Health Systems Support Woman-Centered Care?

Shaw D et al. Drivers of Maternity Care in High-Income Countries: Can Health Systems Support Woman-Centered

Care?. The Lancet 2016. DOI: 10.1016/S0140-6736(16)31527-6. DOI: [https://doi.org/10.1016/S0140-6736\(16\)31527-6](https://doi.org/10.1016/S0140-6736(16)31527-6).

#### Article. Next Generation Maternal Health: External Shocks and Health-System Innovations

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Kruk ME et al. Next Generation Maternal Health: External Shocks and Health-System Innovations. The Lancet 2016. DOI: 10.1016/S0140-6736(16)31395-2. DOI: [https://doi.org/10.1016/S0140-6736\(16\)31527-6](https://doi.org/10.1016/S0140-6736(16)31527-6).

**Article. Quality Maternity Care for Every Woman, Everywhere: A Call to Action**

Koblinsky M et al. Quality Maternity Care for Every Woman, Everywhere: A Call to Action. The Lancet 2016. DOI: 10.1016/S0140-6736(16)31333-2. DOI: [https://doi.org/10.1016/S0140-6736\(16\)31333-2](https://doi.org/10.1016/S0140-6736(16)31333-2).



## Annotated Bibliography

### AT-A-GLANCE

#### Report. **Losing More Ground: Revisiting Young Women’s Well-Being Across Generations in the United States**

Srygley S et al. Losing More Ground: Revisiting Young Women’s Well-Being Across Generations in the United States. Population Reference Bureau 2023; 77(1). <https://www.prb.org/resources/losing-more-ground>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/11577>

This report from the Population Reference Bureau (PRB) presents an updated analysis of the well-being of young women aged 25 to 34 in the United States. This report uses the PRB's Index of Young Women’s Well-Being, a tool created in 2017 to assess outcomes for young women across generations, analyzing 14 indicators covering physical and mental health, education, poverty, labor force participation, and more. This updated report focuses on how the well-being of women ages 25 to 34—or Millennials—compares to women of the same age in the previous generations. The 2023 report finds that while there was improvement for women in areas such as increased education, wages, and labor force participation, progress worsened significantly between 2019 and 2022 due to a number of significant events—the onset of the COVID-19 pandemic, restriction of abortion rights in the U.S., and growing inflation. The report presents key health and safety findings for women aged 25 to 34, including increasing suicide rates compared to women in Generation X, surging maternal mortality rates, and rising homicide rates.

#### Article. **Measuring U.S. Maternal Mortality**

Declercq E, Thoma M. Measuring US Maternal Mortality. JAMA 2023; 330(18):1731–1732.

DOI: <https://doi.org/10.1001/jama.2023.19945>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/14179>

This viewpoint article published by JAMA provides insight into the three main government data sources on U.S. maternal mortality: the National Vital Statistics System (NVSS), the Centers for Disease Control and Prevention's Pregnancy Related Mortality Surveillance System (PMSS); and state Maternal Mortality Review Committees (MMRSc). The article compares the different maternal mortality and pregnancy-related mortality rates produced by each data source and discusses the challenges of measuring maternal mortality in the U.S. The viewpoint also discusses how measuring processes could be refined for consistency, clarity, and timeliness.

#### Brief. **Maternal Mortality Rates in the United States, 2021**

Hoyert DL. Maternal Mortality Rates in the United States, 2021. NCHS Health E-Stats 2023.

DOI: <https://dx.doi.org/10.15620/cdc:124678>.

This brief from the National Center for Health Statistics (NCHS) presents maternal mortality rates in the United States in 2021. The brief presents number of live births, maternal deaths, and maternal mortality rates by race/ethnicity and age group. In 2021, the maternal mortality rate was 32.9 deaths per 100,000 live births, compared to 23.8 deaths in 2020; and the maternal mortality rate for Black women was 69.9 deaths per 100,000 births, nearly 3 times the rate of White women in the U.S.

#### Web Portal. **State Legislation Tracker: Major Developments in Sexual and Reproductive Health**

State Legislation Tracker: Major Developments in Sexual and Reproductive Health. Guttmacher Institute 2023.

<https://www.guttmacher.org/state-policy>.

This data portal from Guttmacher Institute tracks state legislation on sexual and reproductive health, spanning abortion, contraception, pregnancy, and HIV/STIs in the United States. Users can view legislation across each of these key issues, including policies surrounding abortion bans, family planning, prenatal care, maternal mortality, and minors’ access to reproductive health care. Users can explore policy developments by year, from 2015 to the present.

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### **Article. The U.S. Maternal Mortality Crisis Continues to Worsen: An International Comparison**

Gunja MZ, Gumas ED, Williams II, RD. The U.S. Maternal Mortality Crisis Continues to Worsen: An International Comparison. The Commonwealth Fund 2022. <https://www.commonwealthfund.org/blog/2022/us-maternal-mortality-crisis-continues-worsen-international-comparison>.

This blog article from the Commonwealth Fund provides a brief overview of the maternal mortality rates in the United States compared to other high-income countries worldwide. The authors discuss that in 2020, the maternal mortality rate in the U.S. was 24 deaths per 100,000 live births, or more than three times the rate of other high-income countries. The article briefly introduces strategies for reducing maternal deaths in the U.S., including universal healthcare, comprehensive reproductive healthcare, and increased postpartum support and services.

### **Report. Racial Disparities in Maternal Mortality**

Racial Disparities in Maternal Mortality. U.S. Commission on Civil Rights 2021. <https://www.usccr.gov/reports/2021/racial-disparities-maternal-health>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13861>

This report from the U.S. Commission on Civil Rights highlights the extreme racial disparity in maternal mortality in the United States, underscoring the impact of the social determinants of health, bias in healthcare, and the federal government's role in addressing these issues. Black women in the U.S. are three to four times more likely to die from pregnancy-related complications than white women, and Native American and Alaska Native women are more than two times as likely to die from pregnancy-related complications as their white counterparts. These disparities have become much more drastic in the past three decades.

The report examines numerous underlying causes of racial disparities in maternal morbidity and mortality, including chronic health conditions like diabetes and heart disease, but also factors like racism, poverty, and lack of access to insurance. The authors review various federal programs like Medicaid, national child and maternal health education programs, and Healthy Start. Further, the report includes a review of three states - Georgia, North Carolina, and New Jersey - where new policies have been developed to gather information about trends and best practices to reduce racial disparities in maternal health. Accompanying this report is a video briefing and a press release.

### **Article. Social and Structural Determinants of Health Inequities in Maternal Health**

Crear-Perry J et al. Social and Structural Determinants of Health Inequities in Maternal Health. *Journal of Women's Health* 2021; 30(2): 230-235. DOI: <https://doi.org/10.1089/jwh.2020.8882>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13864>

This article from the *Journal of Women's Health* provides an expansion of the literature review on the social determinants of maternal health to include the "structural determinants of health" and "root causes of inequalities," with the ultimate goal of exploring racism as a cause of inequities in maternal health outcomes. The authors underscore the importance of the World Health Organization's Commission on the Social Determinants of Health, as it was critical to identifying and addressing the conditions in which people live, grow, work, and age. However, the term "social determinants of health" has lost its meaning within broader systems of care due to misuse, lack of context, and large social gradients in outcomes. By expanding the reviewed literature, Crear-Perry et al. examined the impacts of racism and its permeation through American societal structures, the effect of the structural and root causes of inequalities on maternal health outcomes, and provided several policy and practice solutions to advance health equity. These recommendations surround topics like paid family leave, health insurance coverage, culturally appropriate care, and more.

### **Brief. The COVID-19 Pandemic is Exacerbating a Human Rights Crisis in U.S. Maternal Health**

The COVID-19 Pandemic is Exacerbating a Human Rights Crisis in U.S. Maternal Health. Center for Reproductive Rights 2021. <https://reproductiverights.org/wp-content/uploads/2020/12/The-COVID-19-Pandemic-is-Exacerbating-a-Human-Rights-Crisis-in-Maternal-Health.pdf>.

This brief from the Center for Reproductive Rights explores the impact of the COVID-19 pandemic on maternal health outcomes in the United States, looking specifically at the health and rights of people who experience pregnancy, birth, and postpartum recovery. The brief identifies various factors impacting pregnant, birthing, and postpartum people exacerbated by COVID-19, including increased risk of COVID-19 infection, increased stress on the healthcare system, and

pre-existing racial and ethnic disparities in maternal health outcomes. The brief also explores the barriers to quality maternal health care caused by the onset of the pandemic, including restricted access to primary and prenatal care and limited provider options. The authors analyze human rights standards for upholding maternal healthcare throughout the pandemic and suggest policy solutions for decision-makers and governments to adopt to alleviate the negative impact on pregnant, birthing, and postpartum people in the U.S.

### **Brief. Maternal Mortality in the U.S.**

Maternal Mortality in the United States: A Primer. The Commonwealth Fund 2020.

<https://www.commonwealthfund.org/publications/issue-brief-report/2020/dec/maternal-mortality-united-states-primer>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13590>

This data brief from The Commonwealth Fund outlines information about the maternal mortality ratio in the U.S.—one of the only countries in the world which have reported an increasing maternal mortality ratio since 2000. The brief harnesses the latest data in order to showcase stark disparities in health outcomes. For example, the maternal death ratio for Black women (37.1 per 100,000 pregnancies) is 2.5 times the ratio for white women (14.7) and three times the ratio for Hispanic women (11.8). Pregnancy-related deaths are a clinical and public health challenge affected by access to treatment before and after birth, the quality of clinical care, the effects of structural racism, and social determinants of health. Policy and clinical perspectives will need to address these factors in order to improve hospital and community care for Black women.

### **Brief. Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries**

Tikkanen R et al. Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries. The Commonwealth Fund 2020. <https://www.commonwealthfund.org/publications/issue-briefs/2020/nov/maternal-mortality-maternity-care-us-compared-10-countries>.

This brief from the Commonwealth Fund compares the maternal mortality rates in the United States with ten other high-income countries, paying special attention to differences in the maternal care workforce, access to postpartum care, and paid maternal leave policies. After analyzing the latest data from the Centers for Disease Control and Prevention and the Organization for Economic Cooperation and Development, the authors found that the U.S. has the highest maternal mortality rate compared to the ten developed countries. The U.S. has an overall shortage of maternity care providers, as most of the maternity care workforce comprises obstetrician-gynecologists. In contrast, a majority of the maternity care workforce in comparison countries is made up of midwives. The authors also noted that the U.S. is the only country not to guarantee access to provider home visits or paid parental leave in the postpartum period.

### **Report. Building U.S. Capacity to Review and Prevent Maternal Deaths: Report From Nine Maternal Mortality Review Committees**

Building U.S. Capacity to Review and Prevent Maternal Deaths: Report From Nine Maternal Mortality Review Committees. Review to Action 2018. [https://reviewtoaction.org/Report\\_from\\_Nine\\_MMRCs](https://reviewtoaction.org/Report_from_Nine_MMRCs).

This report leverages data from 9 maternal mortality review committees (MMRC) in the U.S. to analyze causes of maternal death, assess preventability, and offer recommendations for action. State and local maternal mortality review committees (MMRC) are well positioned for understanding why preventable maternal deaths still happen and prioritizing the actions needed to reduce those deaths. This critical report confirms that most pregnancy-related deaths are preventable—nearly half attributable to hemorrhage, cardiovascular conditions, cardiomyopathy, infections. The most common factors contributing to death included lack of knowledge of warning signs, provider misdiagnosis or ineffective treatment, and lack of coordination between providers. Coupled with recommendations for high-impact actions, the report also identifies how MMRCs can also address health inequities within maternal health.

### **Data Portal. The U.S. Maternal Vulnerability Index**

The U.S. Maternal Vulnerability Index. Surgo Ventures. <https://mvi.surgoventures.org>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13869>

This data portal from Surgo Ventures provides a comprehensive tool using 2021 data to examine the range of factors that influence adverse pregnancy outcomes in the United States, where the maternal mortality rate remains the highest of any industrialized country in the world. The U.S. Maternal Vulnerability Index (MVI) is the first county-level, national-scale tool to rank vulnerability to poor maternal health outcomes and identify the regions and factors impacting

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susceptibility to these outcomes for U.S. mothers. The index ranks counties and states on overall vulnerability to poor pregnancy outcomes and vulnerability across six themes: reproductive health, physical health, mental health and substance abuse, general healthcare, socioeconomic determinants, and physical environment. Users can explore data by county and state, including the assigned score for each region on a scale from 0-100, with a higher score representing an increased vulnerability for poor maternal health outcomes.

The portal also provides data on the impact of racial inequities in maternal health and allows users to explore maternal vulnerability by race and ethnicity across geographic regions.

The tool is accompanied by a detailed [report](#) that discusses the Maternal Vulnerability Index and explores insights from the tool concerning the geography and drivers of maternal vulnerability in the U.S.

### Web Portal. Giving Birth in America

Giving Birth in America. Every Mother Counts. <https://everymothercounts.org/giving-birth-in-america>.

This web portal from Every Mother Counts highlights the maternal health crisis in the United States, specifically examining the issues impacting maternal healthcare through a documentary film series featuring various states in the U.S. The short film series, Giving Birth in America, looks specifically at six different states: Montana, New York, Florida, Louisiana, California, and New Mexico- and documents the experiences of expectant mothers, their healthcare providers, and the obstacles women face before and after childbirth. The series offers insight into the social and structural factors that affect poor maternal outcomes and contribute to the maternal health crisis in the U.S., including discrimination, poverty, illness, overuse of medical interventions, and more.

### Data Portal. Women's Health

Women's Health. Henry J. Kaiser Family Foundation. <https://www.kff.org/state-category/womens-health>.

This data portal from the Henry J. Kaiser Family Foundation (KFF) provides information on women's health status, the utilization of services, health insurance coverage, family planning and childbirth, and abortion statistics and policies in the United States. Users can filter resources by category, subcategory, or specific indicator in order to view interactive data tables and figures with national and state-level information. Users can also engage with an interactive map and dashboard of the latest data on women's health, with several indicators broken down for women of different racial and ethnic groups. Additional topics include poverty, mental health, HIV, cancer, pregnancy, abortions, and use of preventative services.

### Data Portal. America's Health Rankings

America's Health Rankings. United Health Foundation. <https://www.americashealthrankings.org>.

This data portal from the United Health Foundation provides a variety of U.S. population health data. America's Health Rankings releases three state ranking reports: the *Annual Report*, which assesses behaviors, public health policies, community and environmental conditions, and clinical care data; the *Senior Report* that studies the health and wellbeing of individuals aged 65 years and older; and, finally, the *Health of Women and Children Report* that examines the needs of women of reproductive age and infants and children under age 18. Users can explore data by state or by health measure.

## NEWS AND NARRATIVES

### Article. As Abortion Laws Drive Obstetricians From Red States, Maternity Care Suffers

Stolberg SG. As Abortion Laws Drive Obstetricians From Red States, Maternity Care Suffers. The New York Times 2023; Sep 6. <https://www.nytimes.com/2023/09/06/us/politics/abortion-obstetricians-maternity-care.html>.

This article from the New York Times details how abortion laws and restrictions in the United States have impacted maternity health care nationwide. In the aftermath of *Roe v. Wade* being overturned, many obstetricians and reproductive health providers have left regions in the wake of hostile abortion laws and restrictions—posing a detrimental effect on access to maternal and reproductive health care. The article details the potential result in maternity care deserts, or regions where there are large gaps in obstetric care, abortion services, or reproductive healthcare providers, and discusses stories from various states in the U.S. facing these new challenges.

### **Article. Why America's Black Mothers and Babies Are in a Life-or-Death Crisis**

Villarosa L. Why America's Black Mothers and Babies Are in a Life-or-Death Crisis. *The New York Times* 2018; Apr 11. <https://www.nytimes.com/2018/04/11/magazine/black-mothers-babies-death-maternal-mortality.html>.

This feature article from the *New York Times* presents the maternal and infant mortality crisis impacting Black women in the United States. The article discusses the extreme disparity in maternal death rates for Black mothers and details the lived experiences of Black women in the U.S. navigating the healthcare system, including racism and bias from healthcare providers, birth experiences, stress, and doula care. The article provides historical context and data on maternal mortality in the U.S. and the systemic and institutional factors that have led to the severe crisis impacting the health and wellbeing of Black women and infants in the United States.

## **SOCIAL DETERMINANTS**

### **Article. Social and Structural Determinants of Health Inequities in Maternal Health**

Crear-Perry J et al. Social and Structural Determinants of Health Inequities in Maternal Health. *Journal of Women's Health* 2021; 30(2): 230-235. DOI: <https://doi.org/10.1089/jwh.2020.8882>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13864>

This article from the *Journal of Women's Health* provides an expansion of the literature review on the social determinants of maternal health to include the "structural determinants of health" and "root causes of inequalities," with the ultimate goal of exploring racism as a cause of inequities in maternal health outcomes. The authors underscore the importance of the World Health Organization's Commission on the Social Determinants of Health, as it was critical to identifying and addressing the conditions in which people live, grow, work, and age. However, the term "social determinants of health" has lost its meaning within broader systems of care due to misuse, lack of context, and large social gradients in outcomes. By expanding the reviewed literature, Crear-Perry et al. examined the impacts of racism and its permeation through American societal structures, the effect of the structural and root causes of inequalities on maternal health outcomes, and provided several policy and practice solutions to advance health equity. These recommendations surround topics like paid family leave, health insurance coverage, culturally appropriate care, and more.

### **Article. More Than Shelter: Housing for Urban Maternal and Infant Health**

Reece J. More Than Shelter: Housing for Urban Maternal and Infant Health. *International Journal of Environmental Research and Public Health* 2021; 18(7): 1-17. DOI: <https://doi.org/10.3390/ijerph18073331>.

This article from the *International Journal of Environmental Research and Public Health* examines the relationship of housing quality, stability, and affordability to infant and maternal health. The author focuses on housing in metropolitan areas in the United States and seeks to understand, through a comprehensive literature review, the pathways by which housing influences infant and maternal health, the role of historical housing discrimination on maternal health, and the best housing practices and interventions to support maternal and infant health outcomes. The existing literature suggests that historical housing discrimination directly impacts the maternal and infant health outcomes seen in the U.S. today, and mitigation of barriers to current housing challenges will require new resources and innovative interventions.

### **Article. Neighborhood Racial and Economic Polarization, Hospital of Delivery, and Severe Maternal Morbidity**

Janevic T, Zeitlin J, Egorova N et al. Neighborhood Racial and Economic Polarization, Hospital of Delivery, and Severe Maternal Morbidity. *Health Affairs* 2020; 39(5): 768-776. <https://doi.org/10.1377/hlthaff.2019.00735>.

This article from *Health Affairs* discusses the potential relationship between neighborhood racial and economic polarization, the hospital where a woman delivers, and the rate of severe maternal morbidity (SMM). The authors used New York City birth and hospitalization data and racial and economic data by ZIP code to evaluate how these determinants affect SMM, defined as having a life-threatening condition or life-threatening procedure during childbirth. They found that women in ZIP codes with the highest concentration of poor Black populations relative to wealthy whites experienced 4 cases of SMM per 100 deliveries compared with 1.7 cases per 100 deliveries among women in neighborhoods with the lowest concentration. Women living in highly polarized neighborhoods were more likely to deliver babies in hospitals located in similarly polarized neighborhoods. The authors describe their data and



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methodology in detail and offer policy implications based on their findings: housing policies that address neighborhood polarization and policies to improve the quality of obstetric care in hospitals where women in highly polarized neighborhoods deliver could mitigate the disparities in SMM.

### **Article. Social Determinants of Pregnancy-Related Mortality and Morbidity in the United States: A Systematic Review**

Wang E et al. Social Determinants of Pregnancy-Related Mortality and Morbidity in the United States: A Systematic Review. *Obstetrics & Gynecology* 2020; 135(4): 896-915. DOI: <https://doi.org/10.1097/aog.0000000000003762>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13865>

This article from *Obstetrics & Gynecology* discusses social determinants of health and their effects on pregnancy-related mortality and morbidity in the United States. The authors conducted a literature review and specifically considered pregnancy-related death, severe maternal morbidity, emergency hospitalizations, and readmissions as adverse maternal outcomes. They analyzed 83 studies: 78 examined socioeconomic position or individual factors, 58 studies had positive findings demonstrating evidence of associations between minority race and ethnicity, and several discussed insurance coverage, education levels, and incidence of death and morbidity. The authors noted that while these studies do provide evidence for the role of social determinants such as race and ethnicity, insurance, and education in pregnancy-related adverse outcomes, additional research is needed for complete analysis.

### **Article. Income Inequality and Racial Disparities in Pregnancy-Related Mortality in the US**

Vilda D et al. Income Inequality and Racial Disparities in Pregnancy-Related Mortality in the US. *Population Health* 2019; 9: 1-11. DOI: <https://doi.org/10.1016/j.ssmph.2019.100477>.

This article from *Population Health* examines the association between state-level income inequality and pregnancy-related mortality among non-Hispanic Black and non-Hispanic white populations in the United States. Using vital records data from 2011 to 2015 and data on Gini coefficients for income inequality, the authors found that state-level income inequality was significantly associated with Black but not white pregnancy-related mortality. The lack of a significant association between income inequality and pregnancy-related mortality among white women suggests that income inequality contributes to the growing racial disparity in maternal death. The results of this study challenge previous research positing that income inequality has a "social pollution" effect on health outcomes as it exerts its effects across all population subgroups. The authors highlighted how Black women face greater structural constraints, decreased opportunities, and stressors induced by individual and institutional racism and discrimination that negatively impact their health and lived experiences. The findings indicate that unequal income heavily reinforces determinants of maternal health among non-Hispanic Black women.

### **Data Publication. Racial/Ethnic Disparities in Pregnancy-Related Deaths – United States, 2007-2016**

Petersen E et al. Racial/Ethnic Disparities in Pregnancy-Related Deaths – United States, 2007-2016. *Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report* 2019; 68(35): 762-765.

DOI: <https://dx.doi.org/10.15585/mmwr.mm6835a3>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13862>

This data publication from the Centers for Disease Control and Prevention's *Morbidity and Mortality Weekly Report* provides calculations of pregnancy-related mortality ratios by demographic characteristics (age, education, and race) for the United States using data from 2007 to 2016. The authors also provide the proportionate cause of death by race and ethnicity over the same time frame, highlighting the total deaths caused by hemorrhage, cardiovascular conditions, or infection, among other causes. Approximately 700 women die in the United States each year due to pregnancy or complications associated with pregnancy, and there are significant racial/ethnic disparities in who suffers from a maternal death. Between 2007 and 2016, the pregnancy-related mortality ratio was 16.7 per 100,000 births in the United States. However, non-Hispanic Black women and non-Hispanic Native American/Alaska Native experience much higher ratios at 40.8 deaths per 100,000 live births and 29.7 deaths per 100,000 live births.



## BIRTH EQUITY

### **Article. Trends in State-Level Maternal Mortality by Racial and Ethnic Group in the United States**

Fleszar LG et al. Trends in State-Level Maternal Mortality by Racial and Ethnic Group in the United States. *JAMA* 2023; 330(1): 52-61. DOI: <https://doi.org/10.1001/jama.2023.9043>.

This article from *JAMA* examines maternal mortality by racial and ethnic group in the United States. The article explores how trends in maternal mortality rates vary by U.S. state and by racial group, analyzing data from 1990 to 2019. The article finds that American Indian and Alaska Native and Black populations are at increased risk, with Black people facing the highest maternal mortality rates in the United States, and the highest risk of maternal death in every year analyzed from 1990 to 2019.

### **Article. Structural Racism and Maternal Health Among Black Women**

Taylor J. Structural Racism and Maternal Health Among Black Women. *The Journal of Law, Medicine and Ethics* 2020; 48: 506-517. DOI: <https://doi.org/10.1177/2F1073110520958875>.

This article from the *Journal of Law, Medicine, and Ethics* advances the notion that structural racism is a powerful social determinant of maternal health in the United States today, a determinant that has roots in a historical system of oppression and the devaluation of women of color. According to the author, the wide disparity in maternal mortality between non-Hispanic white and non-Hispanic Black women cannot solely be attributed to social determinants like poverty, educational attainment, or healthcare access. The author explains the importance of structural racism as a determinant of maternal health through two lenses: a historical analysis of how racism has been integrated into American societal structures and an examination of how historical oppression continues to perpetuate racial inequalities in health care in modern times, leading to poor maternal health outcomes for Black women. Potential solutions are offered for improving public policies and health practices to promote and support quality health care for Black women countrywide.

### **Article. Maternal Mortality Among American Indian/Alaska Native Women: A Scoping Review**

Heck J et al. Maternal Mortality Among American Indian/Alaska Native Women: A Scoping Review. *Journal of Women's Health* 2021; 30(2): 220-229. DOI: <https://doi.org/10.1089/jwh.2020.8890>.

This article from the *Journal of Women's Health* synthesizes available literature surrounding American Indian and Alaska Native maternal mortality. While global maternal mortality has declined globally from 2000 to 2017, the maternal death rate in the United States has continued to climb over the same period. Much attention has been paid to the racial disparity in maternal death between non-Hispanic white and non-Hispanic Black women. However, there has been much less focus on the disproportionate maternal death rate experienced by American Indian and Alaska Native women. The author found that the three leading causes of American Indian and Alaska Native pregnancy-related mortality are hemorrhage, cardiomyopathies, and hypertensive disorders of pregnancy. Maternal mortality data for homicide and suicide among these groups are hard to come by, often the result of small sample sizes or the categorization of American Indian and Alaska Native women in an "Other" race/ethnicity category. Despite the disproportionately high pregnancy-related mortality experienced by American Indian and Alaska Native women, little is known about the root causes of the disparity due to data shortages and lack of research.

### **Article. Racial and Ethnic Disparities in Maternal Mortality in the United States Using Enhanced Vital Records, 2016-2017**

MacDorman M et al. Racial and Ethnic Disparities in Maternal Mortality in the United States Using Enhanced Vital Records, 2017-2017. *American Journal of Public Health* 2021; 111(9): 1673-1681.

DOI: <https://doi.org/10.2105/AJPH.2021.306375>.

This article in the *American Journal of Public Health* examines the vital statistics mortality data from 2016 to 2017 to better understand racial and ethnic disparities in maternal mortality in the United States. Further, the authors break down maternal deaths by cause, using the actual words written on the death certificate. The authors found that the maternal mortality rate for non-Hispanic Black women was 3.55 times that for non-Hispanic white women. The leading causes of maternal death for non-Hispanic Black women were eclampsia and preeclampsia and postpartum cardiomyopathy with rates five times those of their white counterparts. Non-Hispanic Black women experienced

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maternal mortality from obstetric embolism and obstetric hemorrhage at rates of 2.3 to 2.6 times those for non-Hispanic whites. These four causes make up nearly 60% of the racial disparity in maternal mortality between non-Hispanic Black women and non-Hispanic white women. The authors go on to highlight how this disparity can be mitigated, focusing on addressing the prominence of cardiovascular conditions and concerns with vital statistics data.

**Report. Advancing Birth Justice: Community-Based Doula Models as a Standard of Care for Ending Racial Disparities**  
Bey A, Brill A, Porchia-Albert C et al. Advancing Birth Justice: Community-Based Doula Models as a Standard of Care for Ending Racial Disparities. Ancient Song Doula Services, Village Birth International, Every Mother Counts 2019.  
<https://everymothercounts.org/wp-content/uploads/2019/03/Advancing-Birth-Justice-CBD-Models-as-Std-of-Care-3-25-19.pdf>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13866>

This report published by Every Mother Counts discusses doula care, which includes non-clinical emotional, physical, and informational support before, during, and after labor and childbirth. Doula care is covered by state Medicaid fee-for-service plans, managed care organizations, or both, in some states. This report highlights that doula care improves childbirth outcomes, increases quality of care, and can achieve cost savings by avoiding unnecessary medical procedures and complications. It also reduces rates of cesarean deliveries, prematurity and illness in newborns, and the likelihood of postpartum depression, but doula care services are largely underutilized in the United States largely due to barriers of access and cost. This report uses New York State as a case study for demonstrating the ways in which community-based doula programs have been strategically implemented to serve families at the highest risk for poor maternal and infant health outcomes. Community-led doula services, as seen in New York, can increase human rights and reproductive justice principles and can be expanded across the United States as a way to address the maternal health crisis. The report makes seven key recommendations for states planning to provide coverage of doula care: adjust reimbursement rates, collaborate with community-based programs, support best practices, develop a comprehensive approach to wellness, provide funds to train and certify a diverse doula workforce, incorporate community engagement, and take active steps to raise awareness about doulas.

**Article. Nothing Protects Black Women From Dying in Pregnancy and Childbirth**

Martin N, Montagne R. Nothing Protects Black Women From Dying in Pregnancy and Childbirth. ProPublica, NPR 2017; Dec 7. <https://www.propublica.org/article/nothing-protects-black-women-from-dying-in-pregnancy-and-childbirth>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/12915>

This investigation from ProPublica and NPR begins with the story of Shalon Irving, a young black epidemiologist at the Centers for Disease Control and Prevention and a lieutenant commander in the Commissioned Corps of the U.S. Public Health Service. Irving, dedicated to addressing health inequities in the U.S., had died suddenly a few weeks after giving birth. Despite demonstrating symptoms of high blood pressure complications, health professionals missed multiple opportunities to diagnose her properly and connect her to effective treatment that would have avoided her death. Irving faced one of the most troubling health disparities facing black women in the U.S. today: maternal mortality. Even for controlling for education, economic status, black women die at disproportionately high rates compared to their white peers. Structural and social issues make for a deadly combination—a combination of differential access to healthy and safe living environments, decent jobs, and health insurance; hospitals shaped by historical segregation; undertreatment of health and pain issues in black patients; and other unconscious biases embedded in the medical system that impact the quality of care black mothers receive. However, it is the chronic stress associated with discrimination that makes black women more vulnerable to early onset of chronic diseases and adverse birth outcomes.

**Report. Reproductive Injustice: Racial and Gender Discrimination in U.S. Healthcare**

Reproductive Injustice: Racial and Gender Discrimination in U.S. Healthcare. Center for Reproductive Rights, National Latina Institute for Reproductive Health, SisterSong Women of Color Reproductive Justice Collective 2014.  
<https://reproductiverights.org/reproductive-injustice-racial-and-gender-discrimination-in-u-s-health-care>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/12908>

This report from the Center for Reproductive Rights and its collaborators assesses ongoing racial and gender discrimination in U.S. healthcare, specifically evaluating U.S. progress through the lens of the International Convention on the Elimination of All Forms of Racial Discrimination. Over the last four decades, black women have been dying at rates four times higher than their white counterparts. Beyond race, other drivers of U.S. maternal mortality include

poverty and lack of health insurance status—social determinants of health that shape health care access, risk factors for maternal death such as diabetes and heart disease, and disparities in quality of care. Among non-citizen women, many are ineligible or face barriers in accessing public or private health insurance—affecting their access to preventive reproductive health services and family planning options. The report spotlights how poor monitoring of maternal mortality health indicators, lack of socioeconomic support for health care services, and lack of comprehensive sexuality education collectively influence growing disparities in maternal mortality in the U.S. The authors recommend that the U.S. eliminates discriminatory policies restricting immigrant women’s access to health insurance; funds expansion of community health centers to better serve low-income and immigrant populations; increases federal Title X family planning funding; expands low-cost outreach programs to service rural and immigrant women; and funds comprehensive sexual and reproductive health education.

### **Web Portal. Working Together to Reduce Black Maternal Mortality**

Working Together to Reduce Black Maternal Mortality. Centers for Disease Control and Prevention.

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

This web portal from the Centers for Disease Control and Prevention (CDC) provides resources to pregnant people, healthcare providers, hospitals and health systems, and states and communities on ways to reduce Black maternal mortality. Information provided includes [warning signs](#) indicating a life-threatening complication for pregnant people to watch for, tools to [flag warning signs early](#) for healthcare providers, methods to address [unconscious bias in healthcare](#) for hospitals and healthcare systems, and [strategies to address social factors](#), like racism, that influence maternal health outcomes. The portal highlights CDC activities to prevent maternal mortality, provides [up-to-date data on racial/ethnic disparities in pregnancy-related deaths](#), and directs users to additional information on [maternal mortality](#).

## HEALTHCARE QUALITY

### **Report. Birth Settings in America: Outcomes, Access, and Choice**

Birth Settings in America: Outcomes, Quality, Access, and Choice. The National Academies Press 2020.

DOI: <https://doi.org/10.17226/25636>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13192>

This report from the National Academies Press (NAP) examines the variety of settings in which women deliver, the health outcomes associated with each setting, and the necessary steps required for addressing poor health outcomes associated with each. Despite the United States spending more on childbirth than any other country in the world, it has worse birth outcomes than other high-income countries - with a higher frequency of bad outcomes occurring for Black and Native American peoples. Within hospitals, there are increasing efforts to minimize non-medically indicated interventions to improve outcomes, such as preventing unnecessary cesarean sections. Improving outcomes for home and birth center deliveries involve integrating the settings into a regulated maternity and newborn care system. This will allow mothers to receive obstetric care if complications arise during delivery. The report also discusses ways to strengthen the maternal care workforce and to improve access to care and birth settings.

The report is accompanied by a [policy brief](#), an [overview of the report](#), an [interactive website](#) presenting the report’s findings, and [slides](#).

### **Article. The Giving Voice to Mothers Study: Inequity and Mistreatment During Pregnancy and Childbirth in the United States**

Vedam S et al. The Giving Voice to Mothers Study: Inequity and Mistreatment During Pregnancy and Childbirth in the United States. *Reproductive Health* 2019; 16(77): 1-18. DOI: <https://doi.org/10.1186/s12978-019-0729-2>.

This article from *Reproductive Health* explores mistreatment in maternity care using survey data to capture the lived experiences of birthing persons in diverse populations. Indicators included in the survey were verbal and physical abuse, autonomy, discrimination, failure to meet professional standards of care, poor rapport with providers, and poor conditions in the health system. The authors found that one in six women reported experiencing one or more types of mistreatment, from being scolded and shouted at to being ignored or threatened. Experiences of abuse were also higher among women who gave birth in hospitals than women delivering at home. Mistreatment rates for women of

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color were consistently higher even when examining interactions between race and other maternal characteristics. For example, 27.2% of women of color with low socioeconomic status reported mistreatment versus 18.7% of white women with low socioeconomic status. Factors associated with low rates of mistreatment included having a vaginal birth, a community birth, a midwife, being white, and being older than 30.

### **Article. Quality of Care and Disparities in Obstetrics**

Howell E, Zeitlin J. Quality of Care and Disparities in Obstetrics. *Obstetrics and Gynecology Clinics of North America* 2017; 44(1): 13-25. DOI: <https://dx.doi.org/10.1016%2Fj.ogc.2016.10.002>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13867>

This article from *Obstetrics and Gynecology Clinics* investigates the links between obstetric quality of care and racial and ethnic disparities. Measuring maternal care quality is complex as it involves assessing the care of two separate individuals: the mother and the infant. Improving care requires reducing obstetric interventions that can harm infants and mothers, like delivery, and avoiding suboptimal care. Little research has been conducted investigating the association between obstetric quality and racial and ethnic disparities in maternal health outcomes, through the authors highlighted a handful of studies indicating that populations of color receive care in different and lower-quality hospitals than their white counterparts. One study in New York City found that Black-white differences in delivery location may contribute to as much as 47.7% of the racial disparity in severe maternal morbidity rates in the city. Further, the authors noted that there are few obstetric quality measures used to track and reduce racial and ethnic disparities. There is a need to develop, track, and improve quality measures sensitive to obstetrics disparities, and the authors highlight potential steps to mitigate this need.

### **Article. Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites**

Hoffman K et al. Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites. *Proceedings of the National Academy of Sciences of the United States of America* 2016; 113(16): 4296-4301. DOI: <https://doi.org/10.1073/pnas.1516047113>.

This article from the *Proceedings of the National Academy of Sciences of the United States of America* examines beliefs associated with racial bias in pain management, a critical health care domain with well-documented racial disparities. Two studies were conducted surrounding the false belief that there are biological differences between Black and white pain perception. The first study documented these beliefs among white laypersons and revealed that participants who strongly endorsed false beliefs about biological racial differences reported lower pain ratings for Black versus white individuals. The second study carried these findings to the medical context, finding that half of a sample of white medical students and residents endorsed these beliefs. Further, participants who supported these beliefs rated Black patients' pain lower than white patients and made less accurate treatment recommendations as a result. These findings indicate that individuals with at least some medical training continue to hold and may use false beliefs about biological racial differences to inform medical judgments.

## SEXUAL AND REPRODUCTIVE RIGHTS

### **Web Portal. State Legislation Tracker: Major Developments in Sexual and Reproductive Health**

State Legislation Tracker: Major Developments in Sexual and Reproductive Health. Guttmacher Institute 2023.

<https://www.guttmacher.org/state-legislation-tracker>.

This data portal from Guttmacher Institute tracks state legislation on sexual and reproductive health, spanning abortion, contraception, pregnancy, and HIV/STIs in the United States. Users can view legislation across each of these key issues, including policies surrounding abortion bans, family planning, prenatal care, maternal mortality, and minors' access to reproductive health care. Users can explore policy developments by year, from 2015 to the present.



### **Web Portal. An Overview of Abortion Laws**

An Overview of Abortion Laws. Guttmacher Institute 2023. <https://www.guttmacher.org/state-policy/explore/overview-abortion-laws>.

This web portal from the Guttmacher Institute provides an overview of U.S. state abortion laws and their major provisions. The portal includes tables detailing abortion laws by state and provides information on physician and hospital requirements, waiting periods, funding, gestational limits, and coverage by private insurance.

### **Web Portal. After Roe Fell: Abortion Laws by State**

After Roe Fell: Abortion Laws by State. Center for Reproductive Rights 2023.

<https://reproductiverights.org/maps/abortion-laws-by-state>.

This web portal from the Center for Reproductive Rights provides an interactive tool that examines the impact on abortion rights in each U.S. state and the District of Columbia in the aftermath of the Supreme Court's decision to overturn *Roe v. Wade* in June 2022. The interactive map examines various legal factors, including laws, constitutions, and court decisions on abortions to help breakdown abortion policy in each region. The tool assigns each state and territory to one of five categories regarding abortion, including "Expanded Access," "Protected," "Not Protected," "Hostile," and "Illegal." The tool can be used to explore abortion laws by state, and helps users understand abortion bans, types of abortion restrictions, trigger bans, and more. In the aftermath of *Roe v. Wade* being overturned, abortion is now illegal in multiple states in the U.S.

### **Brief. The U.S. Maternal Health Divide: The Limited Maternal Health Services and Worse Outcomes of States Proposing New Abortion Restrictions**

The U.S. Maternal Health Divide: The Limited Maternal Health Services and Worse Outcomes of States Proposing New Abortion Restrictions. Commonwealth Fund 2022. <https://www.commonwealthfund.org/publications/issue-briefs/2022/dec/us-maternal-health-divide-limited-services-worse-outcomes>.

This issue brief from the Commonwealth Fund considers how abortion restrictions and bans will impact maternal and infant health outcomes and access to care in the United States. The brief assesses the status of maternal and infant health in U.S. states with bans or restrictions on abortion access, and compares this data to states unlikely to pass abortion restrictions. The brief focuses on comparing data across four key areas: (1) availability of maternal care resources; (2) maternal and infant health outcomes; (3) health coverage policies; and (4) performance of the health system. The authors find that compared to states where abortion is accessible, states with abortion bans or restrictions have fewer maternity care providers, higher rates of maternal mortality and infant death, and higher overall death rates for women of reproductive age.

### **Data Interactive. How State Policies Shape Access to Abortion Coverage**

Interactive: How State Policies Shape Access to Abortion Coverage. Henry J. Kaiser Family Foundation 2023.

<https://www.kff.org/womens-health-policy/issue-brief/interactive-how-state-policies-shape-access-to-abortion-coverage>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/11264>

This data interactive, developed by the Kaiser Family Foundation (KFF), shows the increase in states with laws restricting abortion coverage when using Medicaid and private insurance from 2010 to the present. The ACA renewed legislative efforts to limit abortion coverage, this time in private insurance plans. The ACA maintains the limits of the Hyde Amendment, which banned federal funding for abortion except for pregnancies that endanger the life of the woman or are a result of rape or incest. The ACA also specifically excludes abortion as an Essential Health Benefit and permits states to ban abortion coverage from Marketplace plans. A handful of states had prior laws restricting abortion coverage in private insurance. After 2010, many more states enacted private plan restrictions and also banned abortion coverage from Marketplace plans, some of which are more restrictive than the Hyde limitations. The set of interactive maps provides up-to-date coverage for all 50 states. The most recent map, accurate as of November 2023, shows that 11 states have Medicaid, Private, and Marketplace limitations, 14 states have Medicaid and Marketplace limitations, eight states plus DC have Medicaid limitations only, and six states have no coverage limitations. Users can download the map data.

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### **Fact Sheet. U.S. Abortion Laws in Global Context**

U.S. Abortion Laws in Global Context. Center for Reproductive Rights 2022. <https://reproductiverights.org/us-abortion-laws-global-context-factsheet>.

This fact sheet from the Center for Reproductive Rights analyzes how U.S. abortion laws and policies compare globally in the wake of federal constitutional protections for abortion being overturned by the Supreme Court. With abortion banned in over a dozen U.S. states—and many other states having severe restrictions, this fact sheet provides an overview of how abortion bans will impact reproductive healthcare and access for populations who already face significant barriers to care. The authors analyze how U.S. abortion policies compare to countries worldwide, detailing abortion laws in several countries, including Tanzania, Brazil, Guatemala, Uganda, France, and more.

### **Report. The Continuing Impacts of the COVID-19 Pandemic in the United States: Findings from the 2021 Guttmacher Survey of Reproductive Health Experiences**

Lindberg L et al. The Continuing Impacts of the COVID-19 Pandemic in the United States: Findings from the 2021 Guttmacher Survey of Reproductive Health Experiences. Guttmacher Institute 2021.

<https://www.guttmacher.org/report/continuing-impacts-covid-19-pandemic-findings-2021-guttmacher-survey-reproductive-health>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13873>

This report from Guttmacher Institute details the 2021 findings from the Guttmacher Survey of Reproductive Health Experiences (GHSRE), which involved surveying a national sample of people in the United States about the ongoing impact of the COVID-19 pandemic on their sexual and reproductive health, behaviors, and access to care. The 2021 report focuses on two critical areas of sexual and reproductive health, fertility preferences and access to care, and involves an expanded sample of survey respondents to include the broader range of gender identities, as well as race and income. The report finds that the pandemic continues to impact fertility preferences and restricts access to sexual and reproductive healthcare, disproportionately impacting the health of respondents of color, LGBTQ+ respondents, and lower-income individuals. The report explores the impact of innovation in healthcare delivery, including the use of telehealth, and provides several policy recommendations aimed toward reducing inequities in sexual and reproductive health.

### **Article. State Abortion Policies and Maternal Death in the United States, 2015–2018**

Vila D et al. State Abortion Policies and Maternal Death in the United States, 2015–2018. *American Journal of Public Health* 2021; 111(9): 1696-1704. DOI: <https://doi.org/10.2105/AJPH.2021.306396>.

This article from the *American Public Health Association* examines the association between state-level abortion policies and maternal mortality from 2015 to 2018 in the United States. Access to abortion care has been named a human right and is a critical component of reproductive care. Internationally, restrictive abortion policies have been recognized as a risk factor for maternal mortality. Yet, more than 1000 laws limiting access to abortion coverage have been put in place in the United States since 1973. The authors found that two specific abortion restrictions, the requirement for licensed physicians and prohibitions against the use of Medicaid funds to pay for abortion care, are significant contributors to the risk of maternal death. The paper analyzes the association between abortion policy and maternal death using a composite index for each state based on eight state-level abortion-restricting policies. The authors underscore that decreasing the number of restrictive abortion policies may reduce the incidence of maternal death in the United States.

### **Article. Abortion Surveillance – United States, 2018**

Kortsmit K et al. Abortion Surveillance – United States, 2018. *Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report* 2020; 69(7): 1-30. DOI: <https://dx.doi.org/10.15585/mmwr.ss6907a1>.

This article from the Centers for Disease Control and Prevention (CDC) documents the number of legal induced abortions and abortion-related deaths in the United States in 2018. Using state and Census data, the authors found that 619,591 abortions were reported in the U.S. in 2018, with a rate of around 11.3 abortions per 1,000 women aged 15-44 years. The article also provides data on abortion rates by age group and race/ethnicity, as well as gestational age of the pregnancy, abortion method, and abortion mortality.



### Article. Abortion Access for Incarcerated People

Sufrin C et al. Abortion Access for Incarcerated People. *Obstetrics and Gynecology* 2021; 138(3): 330-337.

DOI: <https://doi.org/10.1097/AOG.0000000000004497>.

This article from *Obstetrics and Gynecology* seeks to understand abortion incidence among incarcerated people and the connection to prison and jail pregnancy policies. Twenty-two state prison systems, all Federal Bureau of Prisons sites, and six county jails were included in the survey. Out of all of the state prisons surveyed, only half allowed abortion in both the first and second trimesters, and 14% did not allow abortion at all. Of the 19 state prisons that permitted abortion, 67% required the incarcerated woman to pay for her abortion. Further, 67% of the jails in the study allowed abortion in the first and second trimesters, and 35% of those required the incarcerated woman to pay. Out of the 816 pregnancies that ended during the study period in state and federal prisons studied, 11 (1.3%) were terminated via abortion. This study demonstrates that many jails and prisons continue to have restrictive policies surrounding abortion, either through self-payment requirements or through complete prohibition.

### Report. Abortion Incidence and Service Availability in the United States

Jones R et al. Abortion Incidence and Service Availability in the United States, 2017. Guttmacher Institute 2019.

DOI: <https://doi.org/10.1363/2019.30760>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13061>

This report from the Guttmacher Institute shares 2017 data on abortions and services in the U.S. The researchers found a 7 percent decline in the usage of abortion services between 2014 and 2017. The abortion rate for 2017 was also the lowest since the legalization of abortion in the U.S. in 1973—13.5 abortions per 1,000 women aged 15-44. The researchers proposed a few explanations for the declines in abortion: There has been a decline in the fertility rate in the U.S., and there have also been improvements in contraceptives. According to the report, the number of women aged 15-44 using long-acting reversible contraceptive methods increased by 23 percent.

The report also noted that drugs similar to those used in the U.S. for medication-induced abortions (mifepristone and misoprostol) are more readily available over the internet. One internet provider, Aid Access, prescribed the regimen 2,500 times – implying that the actual abortion rate in the U.S. could be higher than what is reported. However, the researchers did note that laws restricting abortions likely had little to do with the reported declines in abortion. A [policy review](#) also accompanies the report.

### Data Portal. Abortion in the U.S. Dashboard

Abortion in the U.S. Dashboard. Henry J. Kaiser Family Foundation. <https://www.kff.org/womens-health-policy/dashboard/abortion-in-the-u-s-dashboard/#related>.

This web portal from the Kaiser Family Foundation (KFF) tracks and updates state abortion policies and litigation following the overturning of *Roe v. Wade*. The data dashboard offers information on the state of abortion in the United States in real time, providing information on key facts related to abortion in the U.S., legal policies, abortion coverage and restrictions, and state-level data and statistics. Users can explore various topics, and related charts and graphs compiled by KFF.

### Data Interactive. US Abortion Policies and Access After Roe

US Abortion Policies and Access After Roe. Guttmacher Institute. <https://states.guttmacher.org/policies>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/12906>

This data interactive from the Guttmacher Institute presents the current fragmented abortion landscape in the U.S. after the Supreme Court overturned *Roe v. Wade* in July 2022. The map organizes states into one of seven categories based on their abortion policies, ranging from most restrictive to most protective. Users can click on each state to access an individual profile of the state's policies, demographic information, and most recent abortion statistics.

### Organization. Center for Reproductive Rights

Center for Reproductive Rights. <https://www.reproductiverights.org>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/12906>

The Center for Reproductive Rights is a global, non-profit, legal advocacy organization focused on advancing reproductive and human rights. The Center's attorneys have expertise in both United States constitutional and

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international human rights law, and they raise their legal cases before national courts, United Nations committees, and regional human rights bodies to expand access to reproductive health care – including birth control, safe abortion, prenatal and obstetric care, and unbiased information. The Center for Reproductive Rights documents abuses of human rights, works with policymakers, focuses on building legal scholarship and teaching about reproductive health and rights. The Center aims to ensure guaranteed quality reproductive health care and to ensure that women can make decisions about their health without coercion or discrimination.

### Organization. Guttmacher Institute

Guttmacher Institute. <https://www.guttmacher.org>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/11323>

The Guttmacher Institute is a research and policy organization dedicated to advancing sexual and reproductive health worldwide through research, policy analysis, and public education. The Institute produces a wide range of resources on topics pertaining to sexual and reproductive health, publishes two peer-reviewed journals, *Perspectives on Sexual and Reproductive Health* and *International Perspectives on Sexual and Reproductive Health*, and the public policy journal *Guttmacher Policy Review*. A comprehensive [data center](#) offers maps, tables, and summaries of both U.S. and international health indicators. Get quarterly updates on the Guttmacher Institute's most recent [state-focused research](#) and analysis, summarized for quick reading with links to full-text and related materials.

## POLICIES AND RECOMMENDATIONS

### Report. Policies for Reducing Maternal Morbidity and Mortality and Enhancing Equity in Maternal Health

Policies for Reducing Maternal Morbidity and Mortality and Enhancing Equity in Maternal Health. Commonwealth Fund 2021. <https://www.commonwealthfund.org/publications/fund-reports/2021/nov/policies-reducing-maternal-morbidity-mortality-enhancing-equity>.

This report from the Commonwealth Fund reviews the best evidence and policy approaches toward reducing maternal mortality and morbidity in the U.S. and eliminating racial inequities in maternal health. The report examines available evidence, including the need for investments in systemic, structural, and social determinants of health, such as housing, the built environment, and access to healthcare. The report examines the evidence for policy around diversifying the perinatal workforce, improving data collection and quality, investments in telehealth services, and improving maternal healthcare for specific populations, such as veterans, incarcerated people, and those with substance use disorders. The report urges a multi-faceted policy approach that includes policies focused on structural racism to best address the U.S. maternal health crisis.

### Brief. Maternal Health Policy Brief: The American Rescue Plan and the 2021 Black Maternal Health Omnibus Act

Barnes S et al. Maternal Health Policy Brief: The American Rescue Plan and the 2021 Black Maternal Health Omnibus Act. Wilson Center 2021. <https://www.wilsoncenter.org/publication/maternal-health-policy-brief-american-rescue-plan-and-2021-black-maternal-health>.

This brief from the Wilson Center outlines the 2021 Black Maternal Health Omnibus Act, a package of evidence-based bills introduced by Congress to address the Black maternal health crisis in the United States. The package includes an expansion of social assistance programs such as Women, Infants, and Children (WIC); funding to diversify the perinatal workforce, including the use of doulas; investment in Black maternal health equity initiatives and organizations; and the standardization of maternal health data collection nationwide. The brief also provides a quick overview of the third COVID-19 relief bill, the American Rescue Plan, estimated to improve maternal and child health outcomes and gives states the option to extend postpartum Medicaid coverage.

### Article. Overview of U.S. Maternal Mortality Policy

Villavicencio J et al. Overview of U.S. Maternal Mortality Policy. *Clinical Therapeutics* 2020; 42(3): 408-418.

DOI: <https://doi.org/10.1016/j.clinthera.2020.01.015>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13868>

This article from *Clinical Therapeutics* outlines current issues and policies to address the rising maternal mortality rate in the United States. The article discusses underlying health policy issues related to tackling maternal mortality, including

challenges in maternal death data collection, the need for standardized health care delivery, expansion of healthcare coverage, and the impact of social determinants on maternal health outcomes. The authors also provide an overview of recent policy proposals and needs related to improving maternal health in the U.S., including Medicaid expansion, improving healthcare access for rural areas, and increased accessibility of contraception and abortion services. The article summarizes the health policy landscape related to maternal mortality in the U.S. and aims to inform the development of policy solutions focused on eliminating poor maternal outcomes that disproportionately impact women of color.

### **Article. Preventing Maternal Mortality in the United States: Lessons From California and Policy Recommendations**

Nichols C, Cohen A. Preventing Maternal Mortality in the United States: Lessons From California and Policy Recommendations. *Journal of Public Health Policy* 2020; 42: 127-144. DOI: <https://doi.org/10.1057/s41271-020-00264-9>. This article published by the *Journal of Public Health Policy* draws lessons on improving maternal health outcomes from California, which has seen a decrease in maternal mortality in recent years. The article identifies strategies the state uses and reviews the implemented policies and practices. The authors identify four major problem areas contributing to poor maternal health outcomes in the U.S.: lack of investment in women's health, poor quality of care, widening disparities in access to care for Black women and women in rural areas, and inconsistent data collection. The article provides various recommendations drawing from the evidence base in California, including funding programs to address social determinants of maternal health, developing national standards of care for healthcare systems, and investing in maternal health monitoring and surveillance.

### **Web Portal. Four State Strategies to Employ Doulas to Improve Maternal Health and Birth Outcomes in Medicaid**

Platt T, Kaye N. Four State Strategies to Employ Doulas to Improve Maternal Health and Birth Outcomes in Medicaid. *National Academy for State Health Policy* 2020. <https://www.nashp.org/four-state-strategies-to-employ-doulas-to-improve-maternal-health-and-birth-outcomes-in-medicaid>.

This web portal from the National Academy for State Health Policy details state strategies in utilizing doula services to improve maternal health and birth outcomes. The portal highlights four state programs in Indiana, Minnesota, Nebraska, and Oregon and the pathways used to provide doula services for women covered by Medicaid in these respective regions. The portal also provides a history of doula services, outlining research indicating their impact on maternal and infant health and the potential benefits of states paying for doula services. The portal summarizes the lessons learned while integrating doula services into state Medicaid programs and provides models for policymakers in other states to utilize doulas to improve birth outcomes and eliminate growing disparities in maternal health in the U.S.

### **Web Portal. State Policies to Improve Perinatal Health Outcomes**

State Policies to Improve Maternal Health Outcomes. *The Commonwealth Fund* 2023.

<https://www.commonwealthfund.org/publications/maps-and-interactives/state-policies-improve-perinatal-health-outcomes>.

This web portal from The Commonwealth Fund provides comprehensive maps outlining policy approaches to reducing gaps in maternal health care and outcomes across the United States. The map offers a state-by-state overview of policies addressing maternal health across three areas: coverage and benefits, care delivery transformation, and data and oversight. The portal aims to inform the state policy landscape and comprehensive approaches to maternal health at the national, state, and community levels.

## FACT SHEETS

### **Fact Sheet. Racial Disparities in Maternal and Infant Health: Current Status and Efforts to Address Them**

Hill L, Artiga S, Ranji U. Racial Disparities in Maternal and Infant Health: Current Status and Efforts to Address Them.

Henry J. Kaiser Family Foundation 2022. <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>.

This fact sheet from the Kaiser Family Foundation (KFF) provides an overview of racial and ethnic disparities in maternal and infant health in the U.S. The brief outlines maternal mortality rates for women by race and ethnicity, citing that Black and AIAN women have significantly higher pregnancy-related deaths rates than white women across all education

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levels. The fact sheet details birth risk factors for infants, including differential access to prenatal care, and considers the wide range of social, economic, and structural factors driving disparities in maternal health, analyzing how racism and discrimination have played a significant role in widening racial disparities in reproductive health. The authors also outline current efforts aimed toward addressing maternal and infant health disparities, including expanding access to coverage and care, implementing evidence-based practices, diversifying the health workforce, and more.

### **Fact Sheet. Adolescent Sexual and Reproductive Health in the United States**

Adolescent Sexual and Reproductive Health in the United States. Guttmacher Institute 2019.

<https://www.guttmacher.org/fact-sheet/american-teens-sexual-and-reproductive-health>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13415>

This fact sheet from the Guttmacher Institute provides information on adolescent sexual and reproductive health in the United States based on the most current available data from nationally representative surveys. The fact sheet covers topics of sexual development, sexual intercourse, contraceptive use, access to services, contraceptive services, prevention and treatment of HIV and other STIs, and sexual health information and education. For each topic, the sheet includes demographic information, trends over time, and general information. Figures with data on select indicators accompany the fact sheet and show nationwide data on sexual intercourse among young people in the U.S., state laws on minors' access to contraceptives, and sex education. The fact sheet emphasizes the importance of ensuring access to reproductive health care services for young people and providing an accurate, comprehensive, inclusive education to support their healthy sexual development and well-being.

## GLOBAL CONTEXT

### **Report. World Population Data Sheet 2023**

2023 World Population Data Sheet. Population Reference Bureau 2023. <https://2023-wpds.prb.org>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/11620>

The 2023 *World Population Data Sheet*, published annually by the Population Research Bureau (PRB), provides the latest data on key population, health, and environment indicators for major world regions and over 200 countries and territories. This year's data sheet has a special focus on climate vulnerability and resilience, examining indicators such as the number of projected deaths due to temperature changes, food insecurity, and the number of internally displaced persons due to disasters. As the effects of climate change intensify, including increasing global temperatures and extreme weather events, such as flooding, population data are significant in assessing exposure and vulnerability to climate risks. The data sheet provides comprehensive data on global population trends, including birth and death rates, total fertility rates, life expectancy at birth, family planning, and more. Overall, the data sheet provides an overview of the demographic trends that shape our world of 8.01 billion people and further illuminates future projected trends.

Chapters include:

- Chapter 1: Special Focus on Climate Vulnerability and Resilience
- Chapter 2: World
- Chapter 3: Africa
- Chapter 4: Americas
- Chapter 5: Asia
- Chapter 6: Europe
- Chapter 7: Oceania

The *World Population Data Sheet* is accompanied by a wide range of materials, including an [interactive data portal](#) of regional overviews and [instructor resources](#) based on the data sheet. The [lesson plan](#), also accompanied by a [PowerPoint Presentation](#), aims to develop students' data literacy skills and knowledge of geography, and is suitable for grades 6-12.

### **Data Publication. Trends in Maternal Mortality (2000-2020)**

Trends in Maternal Mortality (2000-2020). United Nations Population Fund, World Health Organization, United Nations Children's Fund, The World Bank Group, United Nations Population Division 2023.

<https://www.who.int/publications/i/item/9789240068759>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13256>

This data publication from the United Nations Population Fund (UNFPA) and collaborators presents global, regional, and country-level estimates on maternal mortality between 2000 and 2020. The report also assesses global progress on Sustainable Development Goal (SDG) target 3.1 to reduce the maternal mortality ratio to less than 70 maternal deaths per 100,000 live births by 2030. The report finds that in 2020, an estimated 800 women died from preventable causes due to pregnancy and childbirth each day—with nearly 95% of all maternal deaths occurring in low and lower-middle-income countries. In addition to reviewing key indicators of maternal mortality progress, the report explores trends over time and includes detailed annexes with country and regional data.

The report is accompanied by a set of [country profiles](#), [downloadable datasets](#), and [data visualizations](#), where users can explore and compare maternal mortality data and trends by country.

### **Report. State of World Population 2023 – 8 Billion Lives, Infinite Possibilities: The Case for Rights and Choices**

State of World Population 2023– 8 Billion Lives, Infinite Possibilities: The Case for Rights and Choices. United Nations Population Fund 2023. <https://www.unfpa.org/swp2023>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/10958>

This report from the United Nations Population Fund (UNFPA) explores how the understanding of global population trends impacts sexual and reproductive health and rights worldwide. As the world's population surpassed 8 billion people in 2022, the report discusses the various perspectives on population and fertility rates, including the growing adoption of government policies to increase, lower, or maintain fertility rates. The report calls for reframing narratives surrounding population growth, urging leaders to consider women's rights and the ability to freely make reproductive choices. This right has become increasingly threatened worldwide through efforts to control population rates, such as coercive contraception or forced sterilization. In the face of rapidly changing global demographics, the report recommends policies that center gender equality, such as parental leave, child tax credits, and universal access to sexual and reproductive health services—to ensure a resilient and equitable future.

In addition to the downloadable publication, an [interactive report website](#) offers narratives and multimedia features. Accompanying the report is the [UNFPA Data Portal](#), a data visualization tool with the most current global population data drawn from UNFPA and other U.N. agencies. The [World Population Dashboard](#) includes information about numerous demographic, social, and health indicators, including fertility rate, maternal health, family planning, information on sexual and reproductive health, and more. Data can be filtered by country and topic, and results can be downloaded as PDFs or Excel files for further analysis. The portal also includes country pages and additional “dashboards” for specific populations and topics, including [female genital mutilation/cutting](#), [midwifery](#), and [adolescents and youth](#).

### **Report. Family Planning 2020: The Arc of Progress**

FP2020: The Arc of Progress. Family Planning 2020 2021. <https://progress.familyplanning2020.org>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/12497>

This report from Family Planning 2020 (FP2020)—a global development collaboration between countries, international donor agencies, and diverse civil society organizations—describes the partnership's country-led efforts to ensure universal access to safe, voluntary family planning services across the globe. Women's and girls' ability to control their reproductive health is a basic human right. Rights-based family planning programs, which are fundamental to achieving global goals for a healthier and more equitable world, represent a development investment that can improve health, strengthen economies, and transform societies. As of July 2020, the total number of women in the 69 FP2020 countries using modern contraceptive methods was 360 million, an increase of 100 million since the partnership's launch in 2012. The report highlights programs and policies passed in FP2020 countries, financial resource mobilization, family planning throughout the Coronavirus Disease 2019 (COVID-19) pandemic, and the continuation of the partnership - rebranded as FP2030.



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The publication examines how the pandemic disrupted many health services, including family planning. For example, lockdowns and closures prevented clinics from providing services, broke supply chains, and made reproductive health care unavailable for some women. A wide range of organizations, from large to grassroots, sought to protect family planning as an essential service and pledged to keep family planning programs running.

### **Report. The State of the World's Midwifery**

The State of the World's Midwifery 2021. United Nations Population Fund 2021.

<https://www.unfpa.org/publications/sowmy-2021>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/12540>

This report from the United Nations Population Fund (UNFPA) focuses on the global state of sexual, reproductive, maternal, newborn, and adolescent health (SRMNAH) in 194 countries, with special attention to trends in midwifery since the first baseline report in 2011. According to the report, there is presently a global shortage of 1.1 million SRMNAH workers, the largest shortage being midwives (900,000). Based on available data, the current workforce could meet only 75% of global SRMNAH needs—in low-income countries, only 41% of needs can be met.

The COVID-19 pandemic has emphasized more than ever the crucial need to invest in primary health care, of which midwives are a cornerstone. Though trained and supported midwives can provide 90% of SRMNAH care, they only make up 10% of the current workforce. The report highlights four key investments required to enable midwives to reach their potential: healthcare workforce planning, management, and regulation; high-quality education and training; midwife-led improvements to service delivery; and midwifery leadership and governance.

The report is accompanied by an [executive summary](#), a [summary video](#), a [data visualization](#), a [fact sheet](#), [technical appendices](#), and [two supplementary white papers](#) on populations more vulnerable to being left behind.

### **Fact Sheet. The U.S. Government and International Family Planning & Reproductive Health: Statutory Requirements and Policies**

The U.S. Government and International Family Planning & Reproductive Health: Statutory Requirements and Policies.

Fact Sheet. Henry J. Kaiser Family Foundation 2023. <https://www.kff.org/global-health-policy/fact-sheet/the-u-s-government-and-international-family-planning-reproductive-health-statutory-requirements-and-policies>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/11215>

This fact sheet from the Henry J. Kaiser Family Foundation summarizes the major statutory requirements and policies pertaining to U.S. global family planning/reproductive health efforts over time and identifies those currently in effect. These laws and policies collectively serve to direct how U.S. funds are spent, to where and which organizations funds are provided, and generally shape the implementation and define the scope of U.S. global reproductive health activities.

### **Data Portal. Maternal Health Atlas**

Maternal Health Atlas. Institute for Health Metrics and Evaluation 2019. <https://www.healthdata.org/data-visualization/maternal-health-atlas>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/13117>

This data portal, the Maternal Health Atlas, developed by the Institute for Health Metrics and Evaluation (IHME), shares information about threats to maternal health, the effects of age and income, the progress being made by country, and key drivers. Global maternal deaths have decreased by 24% over the last decade, but maternal morbidity and non-fatal complications are increasing. The Atlas provides data on trends from 1990-2017, a breakdown of key factors related to maternal health, key drivers including population growth, population ageing, and fertility, and fact sheets for various population profiles.



### **Report. Accelerate Progress—Sexual and Reproductive Health and Rights for All: Report of the Guttmacher–Lancet Commission**

Starrs AM et al. Accelerate Progress—Sexual and Reproductive Health and Rights for All: Report of the Guttmacher–Lancet Commission. *The Lancet* 2018; 391(10140): 2642–2692. DOI: [https://doi.org/10.1016/S0140-6736\(18\)30293-9](https://doi.org/10.1016/S0140-6736(18)30293-9).

GHELI repository link: <https://repository.gheli.harvard.edu/repository/12426>

This Guttmacher–Lancet Commission report offers a new, comprehensive definition of sexual and reproductive health and rights (SRHR), proposes an essential package of related health services, and identifies actions needed from outside the health sector to modify social norms, laws, and policies to uphold human rights. SRHR are critical to sustainable development because of their relationships to gender equality and women’s health and well-being, as well as their impact on maternal, newborn, child, and adolescent health. They also play an important role in shaping economic development and environmental sustainability. The Commission’s authors argue that the modest and affordable investments in sexual and reproductive health services will pay dividends over many years and enable greater progress in achieving other development goals.

### **Article Series. Maternal Health 2016**

Maternal Health 2016. *The Lancet* 2016. <https://www.thelancet.com/series/maternal-health-2016>.

GHELI repository link: <https://repository.gheli.harvard.edu/repository/11142>

This *Lancet* Series addresses current knowledge of maternal health, its epidemiology, successes, and current failings. In addition to broad surveys of the state of maternal health and care worldwide, the series papers also examine the burden of poor maternal health as well as the role of health systems in maternal care. The series concludes with a call to action setting out five key targets within the context of the broader sustainable development goals (SDGs).

Accompanying resources include an eight-page executive summary and a photo gallery depicting maternal challenges of Syrian refugees in Turkey.

Series papers include:

- [Diversity and Divergence: The Dynamic Burden of Poor Maternal Health](#)
- [Beyond Too Little, Too Late and Too Much, Too Soon: A Pathway Towards Evidence-Based, Respectful Maternity Care Worldwide](#)
- [The Scale, Scope, Coverage, and Capability of Childbirth Care](#)
- [Drivers of Maternity Care in High-Income Countries: Can Health Systems Support Woman-Centred Care?](#)
- [Next Generation Maternal Health: External Shocks and Health-System Innovations](#)
- [Quality Maternity Care for Every Woman, Everywhere: A Call to Action](#)