

Maternal Health

DEFINITION

Maternal health includes adequacy of prenatal care, health before pregnancy begins, mental and physical health in the perinatal period, and maternal morbidity and mortality. Data are reported by place of mother's residence, not place of infant's birth.

SIGNIFICANCE

Maternal health before pregnancy (preconception), during pregnancy, and after birth (postpartum) impacts health outcomes for mothers and children.¹ Currently, there is a maternal health crisis nationally and in Rhode Island. Beyond that, there are persistent racial and ethnic disparities that disproportionately impact health outcomes for Black, Indigenous, and Women of Color.² Social determinants of health, including economic and food security, safety, and social supports impact pregnancy and postpartum health, as well as infant health.³

Early, adequate, and appropriate prenatal care is an important way to identify and treat health problems as well as influence behaviors that can affect the health and well-being of infants and mothers. Women receiving late or no prenatal care are at increased risk of poor birth outcomes, such as having babies who are low birthweight or who die within the first year of life.^{4,5}

Effective prenatal care screens for

and intervenes with a range of maternal needs including nutrition, social support, mental health, smoking cessation, substance use, domestic violence, and unmet needs for food and shelter. A prenatal visit to a pediatrician is the first step in establishing an infant's medical home and can provide valuable links to other services.^{6,7}

Early prenatal care is especially important for women who face multiple risks for poor birth outcomes, as is ensuring access to health care services before pregnancy. Effective monitoring and treatment of chronic disease, providing health education, and ensuring access to culturally and linguistically competent health care can improve maternal and infant outcomes.^{5,8}

Perinatal mood and anxiety disorders are the most common complication of pregnancy and the first year postpartum. If these issues are not addressed, they can result in poor outcomes including preterm birth, trouble bonding with infants, and breastfeeding challenges. Meeting maternal mental and behavioral health needs improves outcomes for babies.⁹

Food and economic security in pregnancy are vital for maternal health. Women living in poverty are at higher risk for poor pregnancy outcomes, and pregnancy exacerbates income disparities that have far-reaching consequences for children and families.^{10,11}



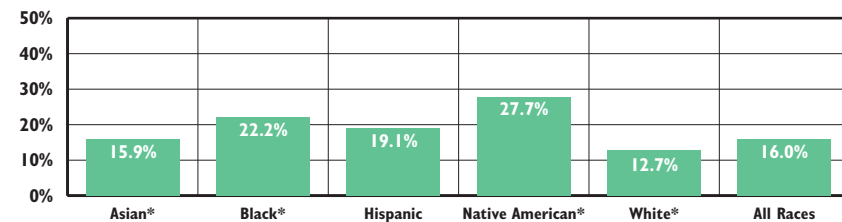
Prenatal Care Access & Benefits

◆ **Barriers to appropriate prenatal care include not knowing one is pregnant, not being able to get an appointment or start care when desired, lack of transportation or child care, inability to get time off work, and lack of insurance or money to pay for desired care.**¹² Rhode Island women with delayed prenatal care are more likely to report their pregnancy was unintended than women who initiated care in the first trimester. Access to contraception, preventative health care services, and the overall health and economic well-being of individuals impact pregnancy intention.^{13,14}

◆ **Access to primary care for women of reproductive age is a vital component of successful pregnancy care. Well-visits are an important opportunity to discuss preconception health for those who intend to become pregnant, offering an opportunity to discuss management of chronic health conditions or past health history that may have an impact on pregnancy health, birth outcomes, and postpartum health, such as management of hypertension before pregnancy to reduce the risk of preeclampsia.**^{15,16}



Women With Delayed or No Prenatal Care by Race/Ethnicity, Rhode Island, 2020-2024



Source: Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2020-2024. * Race categories are non-Hispanic.

◆ **In Rhode Island between 2020 and 2024, 16.0% of women who gave birth did not begin care until the second or third trimester, if at all. Between 2020 and 2024 in Rhode Island, Native American (27.7%), Black (22.2%), Hispanic (19.1%), and Asian women (15.9%) were more likely to receive delayed prenatal care than white women (12.7%).**¹⁷



Insurance Coverage Improves Access to Prenatal Care

- ◆ In the U.S. and Rhode Island, women with private insurance have the highest rates of timely prenatal care. Health care before pregnancy is important for maintaining women’s reproductive health and ensuring that they can access the reproductive health services they need.^{16,17}
- ◆ Between 2020 and 2024, women with health coverage through Rite Care (Rhode Island’s Medicaid managed care program) were much less likely (21.2%) to receive delayed/no prenatal care than women who were uninsured (41.6%). Women with private insurance coverage were the least likely to receive delayed/no prenatal care (11.9%).¹⁷



Social Factors Impacting Maternal Health

- ◆ In Rhode Island in 2023, nearly one in five women (19.7%) reported food or housing insecurity in the 12 months before birth.¹⁸ Malnutrition during pregnancy can lead to later health problems in children, including obesity, diabetes, and heart disease.¹⁹ Housing instability and homelessness during pregnancy are associated with higher rates of preterm birth, low birth weight infants, neonatal intensive care unit (NICU) admission, and delivery complications.¹⁷
- ◆ Of Rhode Island women who worked during their pregnancy in 2023, over two thirds (67.6%) felt they were able to take too little time off.¹⁸ Rhode Island recently increased the number of weeks available through the state’s paid family leave program to eight weeks beginning in January 2026 and increased the wage replacement rate. However, it still lags behind other states that provide paid family leave.^{11,20-23}
- ◆ Between 2020 and 2024 in Rhode Island, women who did not graduate from high school were more likely to receive delayed prenatal care than women with more than a high school education (27.9% compared to 12.9%). Adolescent and teen mothers were more likely to receive delayed prenatal care than older mothers in Rhode Island. About one in five (20.1%) pregnant women in the five core cities received delayed prenatal care compared to 13.3% in the remainder of the state.¹⁷



Maternal Mental Health

- ◆ Perinatal mood and anxiety disorders (including anxiety and depression that occurs during pregnancy or in the first year after birth) are one of the most common complications of pregnancy.²⁴ Approximately one in six Rhode Island women report experiencing depression during pregnancy.⁹
- ◆ Untreated mental health disorders during pregnancy and after having a baby can lead to negative outcomes such as preterm birth, trouble bonding with infants, and difficulty breastfeeding.⁹
- ◆ In addition to the impacts on individual families, untreated perinatal mood and anxiety disorders are estimated to cost Rhode Island \$9.7 million annually.⁹
- ◆ Identification and treatment is crucial in managing mental health during pregnancy and postpartum. Rhode Island’s MomsPRN (psychiatry resource network) program is a statewide teleconsultation program that supports health care professionals in identifying and managing the mental health and substance use needs of pregnant and postpartum patients. In 2025, RI MomsPRN helped 358 perinatal patients. Of these patients, 56.1% had public insurance, 43.2% had commercial insurance, and <1% had no insurance.²⁵



RI MomsPRN Perinatal Patients Served by Race in Rhode Island, 2025

American Indian or Alaska Native	3.0%
Asian	1.3%
Black or African American	16.4%
Native Hawaiian or Other Pacific Islander	2.7%
Multiracial/ Other Race	16.5%
White	60.1%

Source: Rhode Island Department of Health. (2026).

Maternal Health

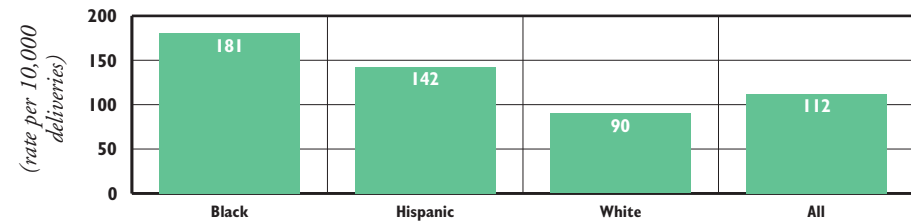


Substance Use During Pregnancy and at Birth

- ◆ Nearly one in four Rhode Island women report substance use, including alcohol, tobacco, e-cigarettes, cannabis, opioids, or other drugs, immediately before, during, or after their pregnancy.²⁴
- ◆ Consistent with national laws, Rhode Island has a Plan of Safe Care process that supports infants born affected by substance exposure, withdrawal symptoms, or a Fetal Alcohol Spectrum Disorder, and their families. Substances can include illicit drugs, cannabis, opioids and opioid agonists, including methadone or buprenorphine, or misused prescription medications. This Plan of Safe Care, known in Rhode Island as Circle of Care Plan, aims to ensure that infants and caregivers affected by prenatal substance exposure have access to the supports and services they need and want after they are discharged from the hospital, including services like Family Home Visiting, Early Intervention, and recovery and treatment supports for caregivers.²⁶ In Rhode Island between 2020-2024, 693 Circle of Care Plans were developed for substance exposed newborns and their caregivers.^{24,26-29}
- ◆ Neonatal abstinence syndrome (NAS) refers to a withdrawal syndrome that can occur in newborns exposed to certain substances, including opioids. Neonatal opioid withdrawal syndrome (NOWS) more specifically refers to the withdrawal symptoms related to opioid exposure. Not all substance exposed newborns are diagnosed with NAS or NOWS.³¹⁻³³
- ◆ In Rhode Island in 2024, the NAS rate of 42 per 10,000 newborn hospitalizations represents a decrease from 2023 when the rate was 52 per 10,000 newborn hospitalizations.³⁰
- ◆ NAS rates will not decrease until Opioid Use Disorder (OUD) rates decrease in the general population. Adequate treatment options and services for those struggling with OUD are needed before and during pregnancy, at birth, and throughout parenting for the whole family.³⁴ There is a need for universal protocols when working with parents, children, and families impacted by substance use and a critical need to address discriminatory attitudes and beliefs about maternal substance use and substance exposed children.^{34,35}



Severe Maternal Morbidity Rate per 10,000 deliveries by Race/Ethnicity, Rhode Island, 2021-2024*



Source: Rhode Island Department of Health, Center for Data and Analysis, 2021-2024 *The definition of severe maternal morbidity has been updated and data in the 2026 Factbook cannot be compared to previous years.

- ◆ Nationally, Black women are almost three times more likely than white women to die of pregnancy-related complications. Racial disparities in maternal mortality span all levels of education, age, income, and insurance status.^{36,37}
- ◆ Across the United States, homicide is one of the leading causes of pregnancy-associated death.³⁸ Forty percent of pregnancy-associated homicides are related to intimate partner violence. In Rhode Island, about three quarters of women who had a well visit in the 12 months before pregnancy reported that their provider talked to them about intimate partner violence.^{18,39}
- ◆ Pervasive racial bias and unequal treatment of Black women in the health care system often result in inadequate treatment for pain.^{14,40} This, coupled with stress from racism and racial discrimination, contribute to the unacceptable health outcomes among Black women and their infants.³⁷
- ◆ In Rhode Island, maternal mortality numbers are too small to report. To better measure maternal health during pregnancy and after childbirth, Rhode Island reports the prevalence of severe maternal morbidity. Severe maternal morbidity is defined as unintended outcomes of labor and delivery that result in significant consequences to a woman's health.¹⁴
- ◆ In 2024, the Rhode Island severe maternal morbidity rate was 119 per 10,000 delivery hospitalizations. Black women (181 per 10,000) and Hispanic women (142 per 10,000) had higher rates of maternal morbidity than white women (90 per 10,000) between 2021 and 2024.¹⁷

Table 16.

Maternal Health, Rhode Island

CITY/TOWN	2020-2024 WOMEN WITH DELAYED PRENATAL CARE			2021-2024 SEVERE MATERNAL MORBIDITY RATE		
	# BIRTHS	# WITH DELAYED CARE	% WITH DELAYED CARE	# DELIVERIES	SEVERE MATERNAL MORBIDITY	SEVERE MATERNAL MORBIDITY RATE PER 10,000 DELIVERY HOSPITALIZATIONS
Barrington	564	87	15.4	436	<5	*
Bristol	682	94	13.8	476	5	*
Burrillville	659	87	13.2	435	<5	*
Central Falls	1,441	339	23.5	1,151	24	208.5 [^]
Charlestown	259	24	9.3	203	<5	*
Coventry	1,444	154	10.7	1,132	10	*
Cranston	3,847	585	15.2	3,151	39	123.8
Cumberland	1,682	218	13.0	1,134	14	123.5 [^]
East Greenwich	679	73	10.8	521	<5	*
East Providence	2,199	298	13.6	1,686	16	94.9 [^]
Exeter	219	23	10.5	156	<5	*
Foster	225	25	11.1	165	0	0.0
Glocester	310	44	14.2	248	<5	*
Hopkinton	304	27	8.9	226	<5	*
Jamestown	137	9	*	97	0	0.0
Johnston	1,381	214	15.5	1,067	8	*
Lincoln	928	132	14.2	695	8	*
Little Compton	78	14	17.9 [^]	34	0	0.0
Middletown	701	84	12.0	520	5	*
Narragansett	271	31	11.4	212	<5	*
New Shoreham	38	5	*	26	0	0.0
Newport	982	172	17.5	744	5	*
North Kingstown	1,067	116	10.9	861	7	*
North Providence	1,566	267	17.0	1,294	18	139.1 [^]
North Smithfield	465	75	16.1	324	<5	*
Pawtucket	4,111	818	19.9	3,116	39	125.2
Portsmouth	625	73	11.7	461	<5	*
Providence	11,091	2,312	20.8	8,600	119	138.4
Richmond	356	31	8.7	224	<5	*
Scituate	450	60	13.3	369	7	*
Smithfield	701	97	13.8	521	<5	*
South Kingstown	819	84	10.3	689	6	*
Tiverton	569	75	13.2	281	<5	*
Warren	427	65	15.2	303	<5	*
Warwick	3,407	440	12.9	2,698	18	66.7 [^]
West Greenwich	239	35	14.6	206	<5	*
West Warwick	1,391	182	13.1	1,136	13	114.4 [^]
Westerly	820	85	10.4	561	<5	*
Woonsocket	2,472	405	16.4	1,841	23	124.9 [^]
<i>Five Core Cities</i>	<i>20,097</i>	<i>4,046</i>	<i>20.1</i>	<i>15,452</i>	<i>210</i>	<i>135.9</i>
<i>Remainder of State</i>	<i>29,509</i>	<i>3,913</i>	<i>13.3</i>	<i>22,548</i>	<i>206</i>	<i>91.4</i>
<i>Rhode Island</i>	<i>49,606</i>	<i>7,962</i>	<i>16.0</i>	<i>41,513</i>	<i>466</i>	<i>112.3</i>

Source of Data for Table/Methodology

Rhode Island Department of Health, Center for Health Data and Analysis, Maternal and Child Health Database, 2020-2024.

The denominator for Delayed Prenatal Care is the total number of live births to Rhode Island residents from 2020-2024 and is reported from birth records of live births for which there is known prenatal care information. The denominator for Severe Maternal Morbidity is the total number of delivery hospitalizations in Rhode Island from 2021-2024 and is reported from delivery records. Not every inpatient delivery results in a newborn outcome or a live birth. The denominators for Delayed Prenatal Care and Severe Maternal Morbidity are not comparable because they are reported from different data sources with different time frames and populations of interest. The method of calculating Severe Maternal Morbidity changed, and data in the 2026 Factbook cannot be compared to previous Factbooks.

*The data are statistically unreliable, and rates are not reported and should not be calculated.

[^]The data are statistically unstable, and rates or percentages should be interpreted with caution.

Five core cities are Central Falls, Newport, Pawtucket, Providence, and Woonsocket.

Due to birth certificate changes that began in 2015, comparisons with previous years should be made with caution. Delayed prenatal care is now a calculated variable that is based on the number of visits over 90 days (3 months). "No prenatal care" is not broken out.

References

- Muglia, L., Tong, S., Ozanne, S., & Benhalima, K. (2022). Maternal factors during pregnancy influencing maternal, fetal and childhood outcomes. *BMC Medicine*, 20(1), 114.
- Office of the White House. (2022). *White House blueprint for addressing the maternal health crisis*.
- Onishi, K., Abuhamad, A., Saade, G., Grobman, W.,... Kawakita, T. (2024). Social determinants of health and disparities in pregnancy outcomes. *O&G Open*, 1(3), 29.

(continued on page 179)

- ¹³ Adams, R. C., Tapia, C., & Council on children with disabilities. (2013). Early intervention, IDEA Part C services, and the medical home: collaboration for best practice and best outcomes. *Pediatrics*, *132*(4), e1073-88.
- ¹⁴ Rhode Island Executive Office of Health and Human Services. (2025). *Rhode Island early intervention providers*. <https://cohhs.ri.gov/Consumer/FamilieswithChildren/EarlyIntervention.aspx>
- ¹⁵ Rhode Island Executive Office of Health and Human Services. (2025). *Center for Child and Family Health*.
- ¹⁶ Congressional Research Service. (n.d.). *The Individuals with Disabilities Education Act (IDEA), Part B: Key statutory and regulatory provisions*. Retrieved February 17, 2025, from [crsreports.congress.gov/product/pdf/R/R41833](https://www.crsreports.congress.gov/product/pdf/R/R41833)
- ¹⁷ Rhode Island Department of Education, Office of Diverse Learners. (2026). *Special Education Census, June 30, 2025*.
- ¹⁸ American Speech-Language-Hearing Association. (n.d.). *IDEA Part C: Transitions (including Part C to Part B/Exiting Part C)*. Retrieved February 17, 2025, from https://www.asha.org/advocacy/idea/idea-part-c--issue-brief-transitions/?srsltid=AfmBOoqIROaAZmRiCh7za7jrXqEi3s_2UZ1lFZ7TfdxVyEHXpESMRfFl
- ¹⁹ Rhode Island Executive Office of Health and Human Services. (2025). *MMIS Database*.
- ²⁰ Rhode Island Executive Office of Health and Human Services. (n.d.). *Katie Beckett program description*. Retrieved February 17, 2025, from <https://cohhs.ri.gov/Consumer/FamilieswithChildren/ChildrenwithSpecialNeeds/KatieBeckett.aspx>
- ²¹ Williams, E., & Oct, M. B. M. (2021). *Children with Special Health Care Needs: Coverage, Affordability, and HCBS Access*. <https://www.kff.org/medicaid/5-key-facts-about-children-with-special-health-care-needs-and-medicaid/#:~:text=Some>
- ²² Centers for Medicare and Medicaid Services. (n.d.). *Early and Periodic Screening, Diagnostic, and Treatment*. Retrieved February 17, 2025, from <https://www.medicare.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html>
- ²³ Szilagyi, M. A. (2015). Health care issues for children and adolescents in foster care and kinship care. *Pediatrics*, *136*(4), e1142-66.
- ²⁴ Child Welfare Information Gateway. (2022). *Healthcare coverage for youth in foster care—and after*. U.S. Department of Health and Human Services, Administration for Children and Families, Administration for Children, Youth and Families, Children's Bureau.
- ²⁵ Child Welfare Information Gateway. (2023). *Adoption and guardianship assistance - Rhode Island*. U.S. Department of Health and Human Services, Administration for Children and Families, Administration for Children, Youth and Families, Children's Bureau.
- ²⁶ National Institute of Mental Health. (2024). *Autism Spectrum Disorder*. <https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd>
- ²⁷ Maenner, M.J., et al. (2023). Prevalence and characteristics of Autism Spectrum Disorder among children aged 8 years: Autism and Developmental Disabilities Monitoring Network, 11 sites, United States, 2020. *MMWR Surveillance Summaries*, *72*(2), 1–14.
- ²⁸ Centers for Disease Control and Prevention. (2024). *Autism Spectrum Disorder: Frequently asked questions (ASD)*. <https://www.cdc.gov/autism/faq/index.html>
- ²⁹ Mayo Clinic. (n.d.). *Autism spectrum disorder*. Retrieved February 17, 2025, from www.mayoclinic.org
- (continued from page 65)
- References for Maternal Health**
- ⁴ Krukowski, R.A., Jacobson, L.T., John, J., Kinser, P., Kampbell, K.,...Krupe, A. (2021). *Correlates of early prenatal care access among U.S. women: Data from the Pregnancy Risk Assessment Monitoring System (PRAMS)*.
- ⁵ U.S. Department of Health & Human Services, Office on Women's Health. (2021). *Prenatal care*. <https://www.womenshealth.gov/a-z-topics/prenatal-care>
- ⁶ Hagan, J. F., Shaw, J. S., & Duncan, P. M. (Eds.). (2017). *Bright futures: Guidelines for health supervision of infants, children, and adolescents (4th ed.)*. American Academy of Pediatrics.
- ⁷ Yogman, M., Lavin, A., & Cohen, G. (2018). The prenatal visit. *Pediatrics*, *142*(1).
- ⁸ Shore, R. & Shore, B. (2009). *KIDS COUNT indicator brief: Reducing infant mortality*. The Annie E. Casey Foundation.
- ⁹ RI MomsPRN: Maternal Psychiatry Resource Network. (2025). *Sustain what works: RI MomsPRN is a vital resource for maternal mental health in Rhode Island*. <https://health.ri.gov/pregnancy/psychiatric-resource-network-programs-ri-momspn-and-pediprn-teleconsultation-services>
- ¹⁰ Feeding America & March of Dimes. (2024). *Key considerations: Prioritizing health equity & food security: Spotlight on maternal health*. https://www.feedingamerica.org/sites/default/files/2024-09/FA_HealthEQ_MOD_2024_f.pdf
- ¹¹ American Public Human Services Association. (2022). *Pregnancy and poverty: Forging a path forward for families*. <https://aphsa.org/resources/pregnancy-and-poverty-forging-a-path-forward-for-families/>
- ¹² Kim, H., Cain, R., Viner-Brown, S., & Roach, C. (2014). *2014 Rhode Island Pregnancy Risk Assessment Monitoring System data book: 2nd edition*. Rhode Island Department of Health.
- ¹³ Kim, H., Monteiro, K., Cooper, T., Viner-Brown, S., & Weber, A. (2018). *2018 Rhode Island Pregnancy Risk Assessment Monitoring System data book: 3rd edition*. Rhode Island Department of Health.
- ¹⁴ Taylor, J., Novoa, C., Hamm, K., & Phadke, S. (2019). *Eliminating racial disparities in maternal and infant mortality: A comprehensive policy blueprint*. Center for American Progress.
- ¹⁵ March of Dimes. (2024). *2024 march of dimes report card for Rhode Island: The state of maternal and infant health for American families*.
- ¹⁶ Preeclampsia Foundation. (2023). *What are the risk factors for preeclampsia? An updated research perspective*. <https://www.preeclampsia.org/the-news/health-information/what-are-the-risk-factors-for-preeclampsia-an-updated-research-perspective>
- ¹⁷ Rhode Island Department of Health, Center for Health Data and Analysis. (2026). *Maternal and Child Health Database, 2020-2024*. Note: data for 26 now excludes blood transfusions in its definition of Severe Maternal Morbidity which accounts for a high amount of previous SMM rates from previous Factbooks.
- ¹⁸ Rhode Island Department of Health. (2025). *Pregnancy Risk Assessment Monitoring System (PRAMS), 2021-2023*.
- ¹⁹ Rhode Island Department of Health. (2022). *Maternal child health report to the legislature*.
- ²⁰ Right From The Start. (2025, June 24). *5 wins for Rhode Island babies, kids & families this legislative session*. Right From The Start RI.
- ²¹ Right from the Start RI. (2024). *2024 general assembly session wins for Rhode Island babies & young children*. <https://rightfromthestartri.org/2024-general-assembly-session-wins-for-rhode-island-babies-young-children/>
- ²² Rhode Island General Law, 28-41-35.
- ²³ Zero to Three. (2024). *Rhode Island's paid leave program is leaving families behind*.
- ²⁴ Rhode Island Psychiatry Resource Network (PRN). (2024). *Program overview: Rhode Island's two PRN programs support healthcare professionals*.
- ²⁵ Rhode island Department of Health. (2026). *Analysis of 2025 RI MomsPRN program data*.
- ²⁶ Rhode Island Department of Children, Youth & Families. (2025, June 16). *Circle of Safe Care Plan*. State of Rhode Island Department of Children, Youth & Families. <https://dcyf.ri.gov/programsinitiatives/circle-safe-care-plan>
- ²⁷ Rhode Island Department of Health Perinatal Substance Use Program. (2026). *Analysis of Rhode Island perinatal substance use data*.
- ²⁸ Rhode Island Department of Health. (2026, March 18). *Substance-exposed newborns: Information for pediatric healthcare professionals*. State of Rhode Island Department of Health.
- ²⁹ Rhode Island Department of Health, Center for Health Data Analysis. (2026). *Plans of Safe Care and NAS*.
- ³⁰ Rhode Island Department of Health. (n.d.). *Newborns affected by substance-exposure: Information for pediatric healthcare professionals*.
- ³¹ Patrick, S., Barfield, W., Poindexter, B. (2020). Committee on fetus and newborn, committee on substance use and prevention: Neonatal Opioid Withdrawal Syndrome. *Pediatrics*, *146*(5).
- ³² Jilani, S.M., Frey, M.T., Pepin, D., Jewell, T., Jordan, M.,...Reefhuis, J. (2019). Evaluation of State-mandated reporting of neonatal abstinence syndrome – six states, 2013-2017. *MMWR. Morbidity and Mortality Weekly Report*, *68*, 6–10.
- ³³ American College of Obstetricians and Gynecologists. (2017). Opioid use and opioid use disorder in pregnancy: Committee Opinion No. 711. In *Obstetrics & Gynecology*. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy>

References

- ³⁴ Ingoldsby, E., Richards, T., Usher, K., Wang, K., Morehouse,....Kopiec, K. (2021). *Prenatal alcohol and other drug exposures in child welfare study: Final report*. U.S. Children's Bureau, Administration for Children and Families.
- ³⁵ Blue Cross Blue Shield: The Health Report of America. (2022). *Racial and ethnic disparities in maternal health*.
- ³⁶ Hill, L., Rao, A., Artiga, S., Ranji, U. (2025). *Racial disparities in maternal and infant health: Current status and key issues*. KFF. <https://www.kff.org/racial-equity-and-health-policy/racial-disparities-in-maternal-and-infant-health-current-status-and-key-issues/>
- ³⁷ Society for Maternal Fetal Medicine. (2025). *New national study finds homicide and suicide is the #1 cause of maternal death in the U.S.* <https://www.smfm.org/news/new-national-study-finds-homicide-and-suicide-is-the-1-cause-of-maternal-death-in-the-us>
- ³⁸ Keegan, G., Hoofnagle, M., Chor, J., Hampton, D., Cone, J.,...Cirone, J.M. (2024). State-level analysis of intimate partner violence, abortion access, and peripartum homicide: Call for screening and violence interventions for pregnant patients. *Journal of the American College of Surgeons*, 238(5), 880–888.
- ³⁹ Centers for Disease Control and Prevention. (2022). *State strategies for preventing pregnancy-related deaths: A guide for moving maternal mortality review committee data to action*. National Center for Chronic Disease Prevention and Health Promotion.
- (continued from page 69)
-
- ### References for Infant Health
- ⁸ Echevarria, E. & Lorch, S. (2022). Family educational attainment and racial disparities in low birth weight. *Pediatrics*, 150(1).
- ⁹ March of Dimes. (2024). *Preterm labor and premature birth: Are you at risk?* <https://www.marchofdimes.org/find-support/topics/birth/preterm-labor-and-preterm-birth-are-you-risk>
- ¹⁰ World Health Organization. (2023). *Preterm births*. <https://www.who.int/news-room/fact-sheets/detail/preterm-birth>
- ¹¹ Ely, D. M., & Driscoll, A. K. (2025). Infant mortality in the United States, 2023: Data from the period linked birth/infant death file. *National Vital Statistics System*, 74(7).
- ¹² Federal Interagency Forum on Child and Family Statistics. (2023). *America's children: Key national indicators of well-being, 2023*. U.S. Government Printing Office.
- ¹³ Centers for Disease Control and Prevention. (n.d.). *Infant mortality*. Retrieved February 29, 2024, from <https://www.cdc.gov/maternal-infant-health/infant-mortality/index.html>
- ¹⁴ Tejada-Vera, B., Bastian, B. A., & Curtin, S. C. (2025). Deaths: Leading causes for 2023. *National Vital Statistics Reports: From the Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System*, 10, 1.
- ¹⁵ Rhode Island Department of Health, Center for Health Data and Analysis. (2026). *Maternal and Child Health Database, 2020-2024*. Note: data for 26 now excludes blood transfusions in its definition of Severe Maternal Morbidity which accounts for a high amount of previous SMM rates from previous Factbooks.
- ¹⁶ Kim, H., Monteiro, K., Cooper, T., Viner-Brown, S., & Weber, A. (2018). *2018 Rhode Island Pregnancy Risk Assessment Monitoring System data book: 3rd edition*. Rhode Island Department of Health.
- ¹⁷ Kaiser Family Foundation. (2022). *Racial disparities in maternal and infant health: Current status and efforts to address them*. kff.org
- ¹⁸ Taylor, J., Novoa, C., Hamm, K., & Phadke, S. (2019). *Eliminating racial disparities in maternal and infant mortality: A comprehensive policy blueprint*. Center for American Progress.
- ¹⁹ Centers for Disease Control and Prevention. (2022). *State strategies for preventing pregnancy-related deaths: A guide for moving maternal mortality review committee data to action*. National Center for Chronic Disease Prevention and Health Promotion.
- ²⁰ March of Dimes. (2018). *Rhode Island community profile*.
- ²¹ Burrell, H., & Hacker, M. (2017). Birth outcome racial disparities: A result of intersecting social and environmental factors. *Seminars in Perinatology*, 41(6), 360–366.
- ²² Robert Wood Johnson Foundation. (2018). *New county rankings show differences in health and opportunity by place and race*. [Press release]. <https://www.rwjf.org/en/about-rwjf/newsroom/2018/03/county-health-rankings-show-differences-in-health-by-place-and-race.html>
- ²³ MacDorman, M. F., & Rosenberg, H. M. (1993). Trends in infant mortality by cause of death and other characteristics, 1960-88. *Vital Statistics. Special Reports. United States. National Office of Vital Statistics*, 20(20), 1–51.
- ²⁴ Murphy, S. L., Kochanek, K. D., Xu, J., & Arias, E. (2024). Mortality in the United States, 2023. *NCHS Data Brief*, 521. <https://doi.org/10.15620/cdc/170564>
- ²⁵ U.S. Department of Health and Human Services, Health Resources and Services Administration. (2015). *Child health USA 2014*.
- ²⁶ Smith, I. Z., Bentley-Edwards, K. L., El-Amin, S., & Darity, W. (2018). *Fighting at birth: Eradicating the black-white infant mortality gap*. Duke University, The Samuel DuBois Cook Center on Social Equity and Insight for Community Economic Development.
- ²⁷ Office of Disease Prevention and Health Promotion. (n.d.). *Healthy People 2030*. U.S. Department of Health and Human Services. Retrieved February 17, 2023, from <https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/infants/reduce-rate-infant-deaths-mich-02>
- ²⁸ Efetevia, V., Gross, E., Wilkins, A. (2019). *Policies that dismantle racism and sexism in health care may reduce Black infant and maternal mortality*. Child Trends.
- ²⁹ Meghea, C. I., You, Z., Raffo, J., Leach, R. E., & Roman, L. A. (2015). Statewide Medicaid enhanced prenatal care programs and infant mortality. *Pediatrics*, 136(2), 334–342.
- ³⁰ Rhode Island Department of Health. (2025). *Family Home Visiting, Family Visiting Database*.
- (continued from page 71)
-
- ### References for Breastfeeding
- ⁵ Hauck, K., Miraldo, M., & Singh, S. (2020). Integrating motherhood and employment: A 22-year analysis investigating impacts of US workplace breastfeeding policy. *SSM - Population Health*, 11(100580), 100580.
- ⁶ U.S. Department of Health and Human Services. (2011). *Executive summary: The surgeon general's call to action to support Breastfeedi.*
- ⁷ Providence Business News Staff. (2015, August 5). Women & Infants receives 'Baby-Friendly' designation. *Providence Business News*. pbn.com/women-infants-receives-baby-friendly-designation107776/
- ⁸ Baby-Friendly USA. (n.d.). *Baby-Friendly facilities A-Z and by state*. Retrieved March 13, 2022, from <https://www.babyfriendlyusa.org/for-parents/baby-friendly-facilities-by-state/>
- ⁹ Ajami, M., Abdollahi, M., Salehi, F., Oldewage-Theron, W., & Jamshidi-Naeini, Y. (2018). The association between household socioeconomic status, breastfeeding, and infants' anthropometric indices. *International Journal of Preventive Medicine*, 9(1), 89.
- ¹⁰ Healthy People 2030. (2020). *Healthy people 2030*. <https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/infants>
- ¹¹ Rhode Island Department of Health [RIDOH]. (2025). *KIDSNET, 2020-2024*. Center for Data and Analysis.
- ¹² Beauregard, J. L., Hamner, H. C., Ms, J. C., Avila-Rodriguez, W., Elam-Evans, L. D., & Perrine, C. G. (n.d.). *Racial Disparities in Breastfeeding Initiation and Duration Among U.S. Infants Born in 2015*.
- ¹³ Jones, K. M., Power, M. L., Queenan, J. T., & Schulkin, J. (2015). Racial and ethnic disparities in breastfeeding. *Breastfeeding Medicine: The Official Journal of the Academy of Breastfeeding Medicine*, 10(4), 186–196.
- ¹⁴ RIDOH. (2024). *Pregnancy Risk Assessment Monitoring System (PRAMS), 2021-2023*.
- ¹⁵ Cunningham, S., Penning, J., Barboza, S., Hansen, B.,...Wolf, R. L. (2024). *Breastfeeding in US working mothers: A systematic review*. <https://doi.org/10.3233/WOR-220645>
- ¹⁶ Pac, J.E., Bartel, A., Ruhm, C.J., Waldfogel, J. (2019). *Paid family leave and breastfeeding: Evidence from California*. National Bureau of Economic Research Working Paper Series.
- ¹⁷ Donovan, S. (2023). *Paid family and medical leave in the United States*. Congressional Research Service. <https://crsreports.congress.gov/product/pdf/R/R44835>
- ¹⁸ Rhode Island General Law, 28-41-35 § H-7171 SubA (2024).
- ¹⁹ National Conference of State Legislatu. (2021). *Breastfeeding state laws*. <https://www.ncsl.org/health/breastfeeding-state-laws>
- ²⁰ Rhode Island General Law, 28-5-7.4 § H-5674 Sub A (2015).
- ²¹ RIDOH. (2026). *License lists: List of licensed lactation consultants in Rhode Island, search of active licenses*. <https://health.ri.gov/licensing/licensee-lists>