Maternal Health Characteristics and Outcomes in New Hampshire: Current Trends and Contributing Factors

Summary of Maternal Health Trends

- **Birth Trends & Demographics:** Births in the state declined by **4%** from 2016 to 2024. Over a quarter **(26.3%)** occurred in rural areas, and nearly **25%** were to women **aged 35 years or older.**
- **Maternal Risk Factors:** In 2024, **58.2%** of women were **overweight or obese** pre-pregnancy. Gestational diabetes affected **10%** of births (**up 1.7%** since 2020).
- **Birth outcomes:** In 2024, **7.9%** of babies born to New Hampshire resident women were **preterm**, and **6.6%** were of **low birth weight**.
- **Prenatal Care Access:** While **85%** women received first-trimester care, lower rates were seen among Medicaid enrollees **(76.1%),** Black or African American women **(67.9%),** and those using substances **(70.6%).**
- **Perinatal Mental Health Conditions (PMHC) & Substance Use:** PMHC rates doubled from **13.2%** (2016) **to 27.6%** (2024); **73.0%** received either treatment or a referral for care. In 2024, maternal **substance use** impacted **6.1%** of infants and was more common among **Medicaid** enrollees and in **Sullivan** and **Coos** counties.
- **Severe Maternal Morbidity (SMM):**Peaked in 2021 at **84.9 per 10,000** live births. **Black or African American women** had the highest SMM rates **(127.1).**Women on Medicaid/Medicare with a substance use disorder (SUD) experienced three times higher rates **(204.8)** than those without SUD**.** The SMM rates was also two times higher among women with a PMHC compared to those without.
- **Maternal Mortality (2019–2023):** There were **35** pregnancy-associated deaths, with **48.6% due to drug overdoses.** Of these deaths, **24** were determined as pregnancy-related deaths, most occurring **postpartum (62.3%)**. Majority **(73%)** of overdose deaths were among Medicaid enrollees.
- **Breastfeeding:** In 2024, **90.4%** of women initiated breastfeeding at delivery discharge, but only **31.6%** exclusively breastfed for **6 months**.
- **Nulliparous, Term, Singleton, Vertex (NTSV) Cesarean Delivery:** The 2024 NH rate was **26.6%**, 1.3% above the national average. Higher rates were seen among women 35 years or older, multiracial, and non-Hispanic Black women.

Introduction

Maternal health is a key indicator of population health and health system performance. It encompasses the health of women during pregnancy, childbirth, and the postpartum period. In recent years, growing attention has been directed toward maternal health outcomes in the United States, where variation in maternal mortality and morbidity continue to persist, even as healthcare systems strive for improvement. Key strategies in New Hampshire include removing healthcare access barriers (e.g., closure of labor and delivery units) and strengthening mental health support to promote healthier pregnancies and safer deliveries.

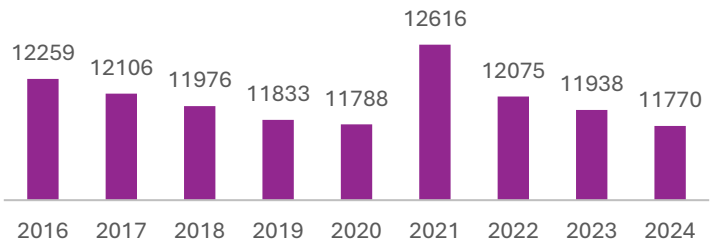
This data brief examines key maternal indicators in New Hampshire such as **prenatal care, PMHC, substance use**, **SMM**, **maternal mortality, breastfeeding, and NTSV cesarean delivery.** Despite its relatively high overall health rankings, social determinants of health contribute to notable differences in maternal outcomes across New Hampshire. Therefore, this brief aims to inform public health planning, policymaking, and community-based initiatives that can promote healthier pregnancies and postpartum experiences for all birthing women in the state.

Background

New Hampshire Birth Population

New Hampshire has experienced a gradual decline in resident births over the past decade. In 2016, there were **12,259** resident births compared to **11,770** in 2024, a **4%** overall decrease. Births peaked temporarily in 2021 before continuing a downward trend.

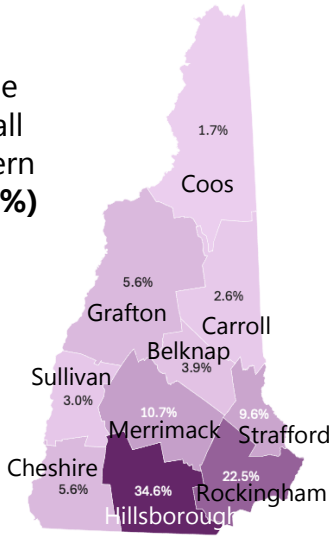
Trend of NH Resident Births (2016-2024)



In 2024, the majority of NH residents who gave birth were **White non-Hispanic (84.2%)**, as compared **to 7.4% Hispanic**, **3.3% Asian**, **and 2.1% Black or African American** women.

Geographic distribution of births shows a higher number of births occurring in the state's southern counties. **Hillsborough (34.6%)** and **Rockingham (22.5%)** alone accounted for over half of all births in 2024, while northern counties such as **Coos (1.7%)** and **Carroll (2.6%)** contributed the smallest shares. This regional variation has implications for resource allocation, especially in rural areas.

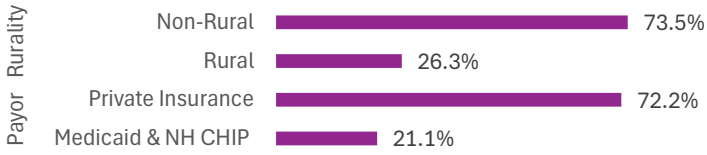
NH Resident Births by County (2024)



In 2024, a majority **(72.2%)** of NH residents who gave birth were covered by **private insurance** while **(3.5%) were self-pay.**

Additionally, **26.3%** of births occurred in **rural areas.**

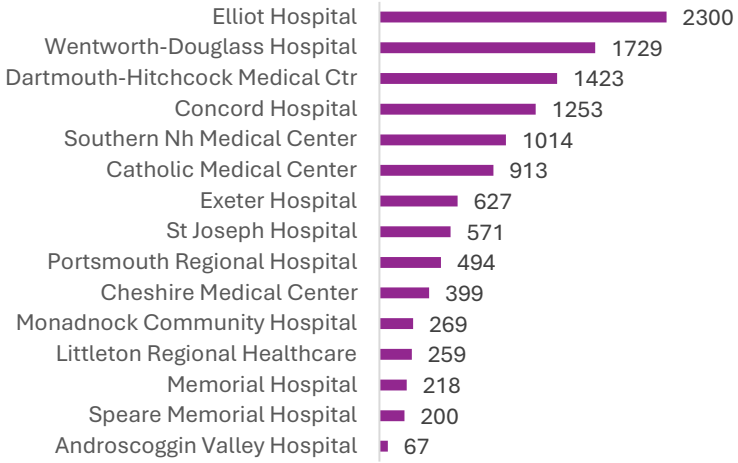
NH Resident Births by Rurality and Payor (2024)



A small (**1.6%)** percentage of residents who gave birth were **under the age of 20**, while nearly one in four births **(24.4%)** were **aged 35 or older**.

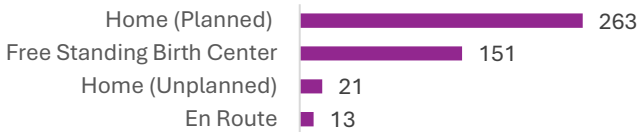
In 2024, **9.3% (1,102)** of NH resident births occurred in out of state hospitals; **12,182** births occurred in NH. Of these, o**10,668** were births to NH residents and **1,514** to non-residents. In 2024, **11,736 births** were filed by NH birthing hospitals. Most births occurred at Elliot hospital in Manchester as presented below.

NH Occurrent Births by Hospital (2024)



While most births occurred in hospitals **(96.3%)**, the next most common birthing locations include home (planned) followed by birthing centers.

Locations of Other NH Occurrent Births (2024)



Closure of **nine rural labor and delivery** units in New Hampshire has led to more women in these areas giving birth in **unplanned locations;** suggesting potential **barriers to healthcare access**, including provider shortages and increased travel distances as described in a previous study.

Data Sources: All data presented on this page is from NH Vital Records Birth Certificate Data

Key Maternal Health Indicators

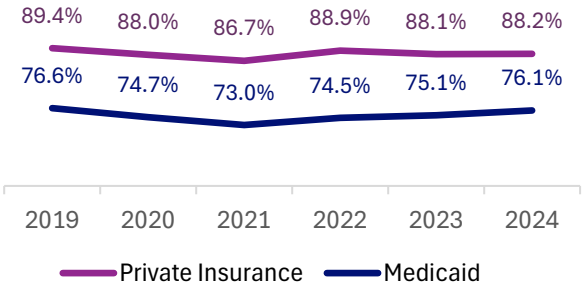
Prenatal Care Access and Timing

Timely access to prenatal care plays a critical role in maternal and infant health outcomes. Early prenatal care allows for appropriate screening, risk identification, and early intervention. Overall, **85.0%** of pregnant women in New Hampshire receive prenatal care in the first trimester. However, prenatal care access differs by payor.

Women with **private insurance** are **more likely to access early prenatal care** as compared to those with Medicaid**.**

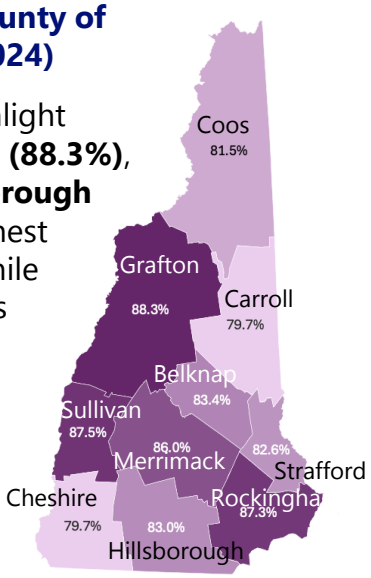
In New Hampshire, **88.2%** women with **private insurance** initiated prenatal care in the first trimester in 2024, compared to only **76.1%** of those covered by **Medicaid**. This persistent gap, averaging over **10%** since 2019, underscores ongoing differences in prenatal care access by insurance type. **Healthy People 2030** sets a goal for **80.5%** of women to begin prenatal care during the first trimester.[1]

Trend of NH Residents Receiving Prenatal Care in the First Trimester



Variation also exists by race and ethnicity. Between 2019 and 2024, **White** (non-Hispanic) and **Asian** (non-Hispanic) residents had the highest rates of early prenatal care entry at **85.6%** and **84.9%**, respectively. In contrast, only **67.9%** of **Black or African American** (non-Hispanic) women received prenatal care in the first trimester, followed by **Native Hawaiian (70.6%)** and **Other Race** (non-Hispanic) **(75.8%)**.

First Trimester Prenatal Care Entry by County of Residence (2024)

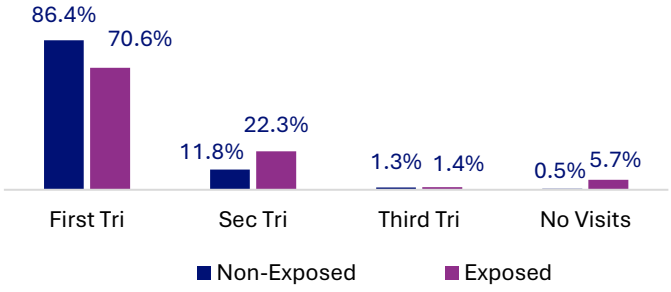


County-level data further highlight geographic variation. **Grafton (88.3%)**, **Sullivan (87.5%)**, and **Hillsborough (87.3%)** counties had the highest rates of early prenatal care, while **Carroll and Cheshire** counties had the lowest rates of early prenatal care entry **(79.7%).** Counties with lower early care entry rates may benefit from targeted outreach and expanded obstetric services.

Substance use during pregnancy is associated with delayed or missed prenatal care, compounding risks for both maternal and infant outcomes. In 2024, only **70.6%** of **substance-exposed births** in New Hampshire received prenatal care in the **first trimester**, compared to **86.4%** among **non-exposed births**.

Women whose infants were exposed to substances were **nearly twice as likely** to enter care in the **second trimester** and **more than ten times as likely** to have **no prenatal visits** at all compared to their counterparts.

NH Resident Time of Entry Into Prenatal Care By Substance Exposure (2024)



These findings emphasize the need to expand access to mental health and substance use services for perinatal women, particularly in counties with lower rates of prenatal care entry in the first trimester.

Data Sources: All data presented on this page is from NH Vital Records Birth Certificate Data

Key Maternal Health Indicators and Outcomes

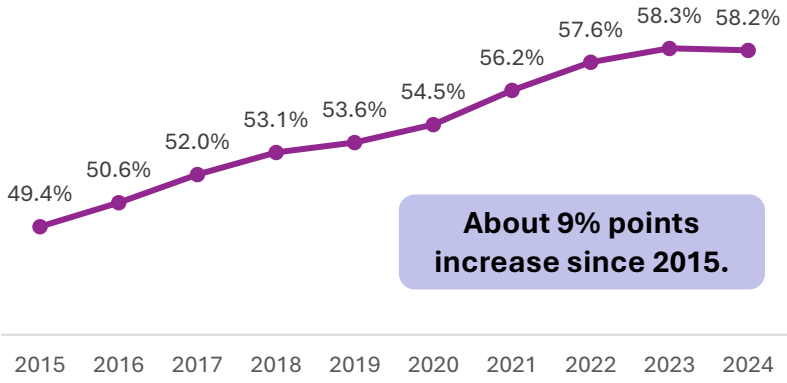
Pregnancy Risk Factors

I. Body Mass Index – Overweight/Obesity

In 2024, **31.3%** of women giving birth were classified as **obese** and **26.9%** were overweight, **39.6%** had a normal BMI and only **2.3%** were **underweight.**

The prevalence of overweight and obese women giving birth in New Hampshire has steadily increased since 2015. This upward trend has significant implications for public health. Elevated pre-pregnancy BMI is linked to increased risks of hypertensive disorders, cesarean delivery, and poor neonatal outcomes,[2] highlighting the need for public health interventions that promote healthy weight before pregnancy. .

Trend of Overweight and Obesity, Births Occurring in New Hampshire

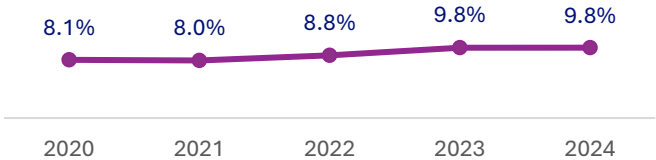


About 9% points increase since 2015.

II. Gestational Diabetes

Gestational diabetes is also associated with poor birth outcomes. The rate of gestational diabetes in New Hampshire has increased by **1.7%** since 2020, with nearly **10% of NH residents giving birth having gestational diabetes**.

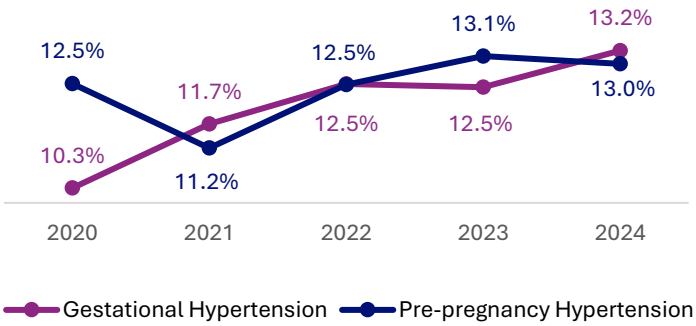
Trend of Gestational Diabetes, NH Resident Births



III. Hypertension

Hypertension is a major risk factor for maternal and infant health complications, including preeclampsia, preterm birth, and low birth weight. In New Hampshire, rates of both gestational and pre-pregnancy hypertension have risen steadily. This upward trend aligns with increases in pre-pregnancy overweight and obesity and underscores the need for consistent monitoring throughout pregnancy to prevent adverse outcomes.

Trend of Gestational and Pre-Pregnancy Hypertension, NH Resident Births



Birth Outcomes

IV. Preterm Birth & Low Birth Weight

In New Hampshire, preterm birth and low birth weight remain steady in the past five years.

In 2024, **7.9%** of New Hampshire resident births occurred **pre-term (<37 weeks)** and **6.6%** of babies were a **low birth weight**.

Preterm birth and low birth weight are key metrics of perinatal health and highlight the need for early, consistent prenatal care. Risk factors for preterm birth include smoking, hypertension, unhealthy weight, diabetes, and substance exposure.[3]

In 2023, **14.4%** of babies **born to mothers who smoke** were **preterm**. Preterm births in mothers with hypertension, unhealthy weight, diabetes, and substance exposure were **14.2%**, **9.3%**, **25.6%**, and **16.5%,** respectively.

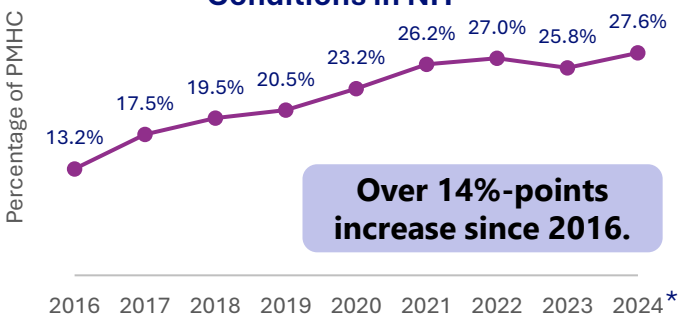
Data Sources: All data presented on this page is from NH Vital Records Birth Certificate Data

Key Maternal Health Indicators

Perinatal Mental Health Conditions & Substance Use

Perinatal mental health conditions (PMHC), including depression and anxiety during pregnancy and the postpartum period, are a growing concern in New Hampshire. Data shows a steady increase in the prevalence of PMHC in the state, **doubling** from **13.2%** in 2016 to **27.6%** in 2024. This upward trend reflects the growing need to ensure maternal mental health services are accessible across the state.

Trend of Perinatal Mental Health Conditions in NH



Over 14%-points increase since 2016.

Source: NH Delivery Hospitalization Data and *NH Vital Records Birth Certificate Data

There are notable geographic disparities in PMHC prevalence across the counties of New Hampshire. These differences may reflect variations in healthcare access, and resource availability.

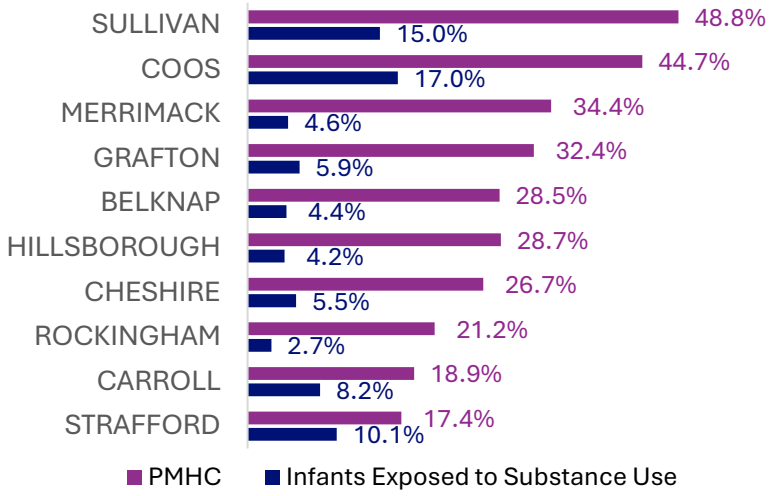
Sullivan and **Coos** counties have the **highest substance use** and **PMHC** prevalence, **two times higher** than rates in **Carroll** and **Stafford**.

Infant exposure to maternal substance use is another key concern, often co-occurring with mental health challenges. Sullivan and Coos counties again top the list, indicating an urgent need for integrated behavioral health and substance use services in these counties.

In 2024, **737 (6.1%)** of infants were exposed to substance use during pregnancy.

Infants born to **Medicaid-enrolled** women had a higher rate of **in-utero substance exposure (15.8% vs. 2.5% for those with private** insurance and **other payors),** highlighting the need for targeted care for publicly insured women.

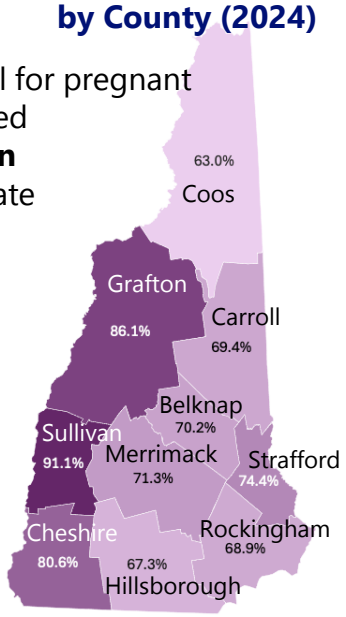
PMHC and Substance Use by County (2024)



The top 5 substances infants are exposed to include **cannabis, nicotine, opioids, stimulants, and cocaine.**

In 2024, **73%** of pregnant Women with a PMHC were **treated or referred**.

PMHC Treatment/Referral by County (2024)



Rates of treatment and referral for pregnant women with PMHC also differed across the state. While **Sullivan** county faces the the highest rate of PMHC, the percentage of patients with PMHC being referred to or receiving treatment was the highest of all New Hampshire counties **(91.1%).** In contrast, counties like **Coos** face low rates of treatment or referral **(63%)** despite having a high PMHC prevalence.

Data Sources: All data presented on this page is from NH Vital Records Birth Certificate Data

Key Maternal Health Indicators

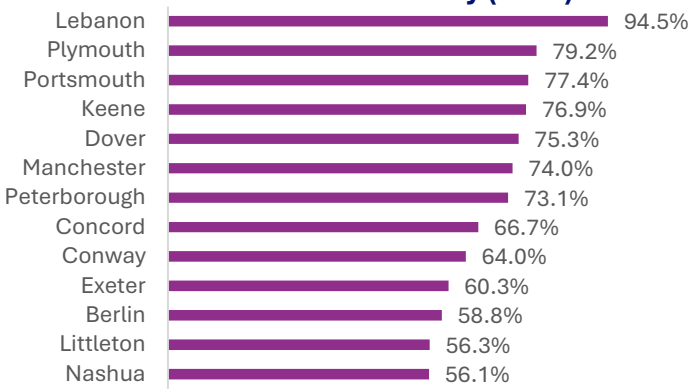
Perinatal Mental Health Conditions & Substance Use Cont.

While earlier data highlighted PMHC treatment and referral rates by county, additional insights emerge when examining these rates by the **town of birth delivery**. This serves as a neutral proxy for the hospital where care was received, rather than where the birthing women resides. Since PMHC referrals often depend on hospital protocols, staffing, and partnerships with behavioral health services, these data can reveal variation in facility-level practices.

In 2024, Lebanon had the highest rate of PMHC patients receiving treatment or referral, **over 1.6 times the rate** seen in **Littleton and Nashua**.

Variation in reported treatment and referral rates suggests a need for targeted improvement in PMHC services at or near certain delivery sites with lower rates.

PMHC Patients Receiving Treatment/Referral by Town of Birth Delivery (2024)



Differences in PMHC also exist by race and ethnicity.

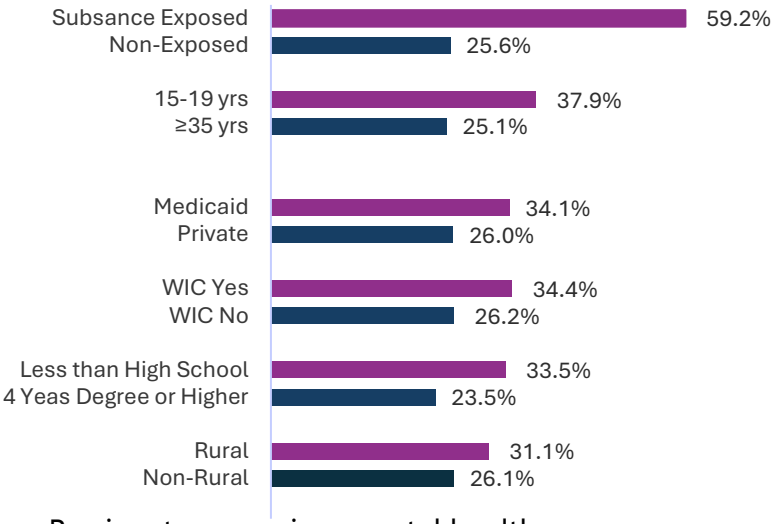
In 2024, women identifying **as non-Hispanic White (29.6%)** and **two or more races (26.8%)** faced the highest rates of PMHC, as compared to **Asian** women, **(7.7%), Hispanic or Latino** women, **(20.1%) Black or African American (15.0%) and Other Races (10.5%).**

1 in 4 Women in New Hampshire report a PMHC. **Anxiety** is the most common condition followed by **depression.**

Source: NH Hospital Discharge data

Variations in PMHC rates are further evident when disaggregated by **demographic and socioeconomic factors**. For example, women with documented **substance exposure** had the highest PMHC prevalence, more than twice the rate of non-exposed women. PMHC was also more common among women residing in rural areas, covered by Medicaid, on WIC, with less education, and who were younger in age.

PMHC by Selected Factors (2024)



Barriers to accessing mental health care are extensive, according to women surveyed in the **2022** Pregnancy Risk Assessment and Monitoring System **(PRAMS)** Social Determinants of Health Supplement.

The most prevalent challenges include:

- **Lack of time** due to responsibilities (**49.1%**)
- **Unawareness** of where to get care (**37.8%**)
- Concerns about **confidentiality** (**19.7%**)
- **Cost** barriers (**12.7%**) and **insurance inadequacy** (**11.0%**).

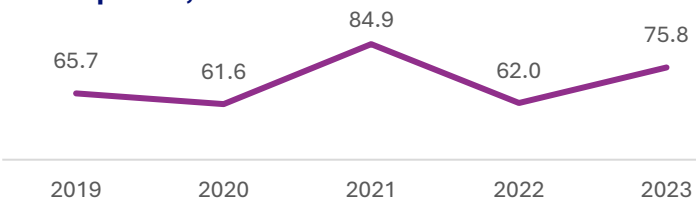
Data Sources: All data presented on this page is from NH Vital Records Birth Certificate Data

Key Maternal Health Indicators

Severe Maternal Morbidity (SMM)

Severe Maternal Morbidity (SMM) includes life-threatening complications during pregnancy, childbirth, or postpartum recovery. In New Hampshire, the SMM rate has fluctuated over the past five years, peaking at **84.9 per 10,000 live births in 2021** before declining slightly to **75.8 in 2023**. These rates highlight persistent and serious risks to maternal health in the state.

Trend in Severe Maternal Morbidity Rate per 10,000 Live Births to NH Residents

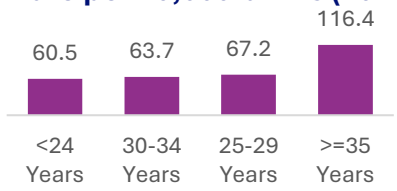


Rates of SMM vary with **maternal age.**

The highest SMM rate was among women who are **35 years or older, nearly double** the rate for women **<24 years old.**

This underscores the need for tailored prenatal care and monitoring for women with advanced maternal age.

SMM rate per 10,000 births (2019-2023)



The **top five SMM conditions,** reported in New Hampshire from 2019 to 2023 were:

- Disseminated Intravascular Coagulation (DIC) (**146** women)
- Acute Renal Failure (**78** women)
- Blood Product Transfusion (**70** women)
- Hysterectomy (**66** women)
- Acute Respiratory Distress Syndrome (**57** women)

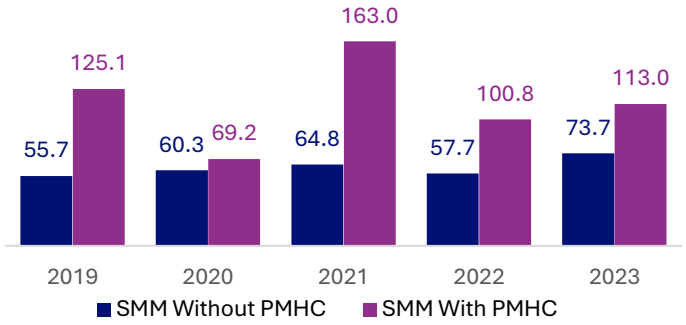
The **SMM rate among Medicaid/Medicare** enrollees with SUD (204.8 per 10,000) is nearly **three times higher** than for those with SUD enrolled in commercial insurance.

Variation in SMM rate also exists between those with and without PMHC.

From 2019 to 2023, women with PMHC consistently experienced **SMM rates nearly double** those without PMHC.

In 2021, during the COVID-19 pandemic, this gap was most pronounced, with SMM rates of **163.0 per 10,000 births** for those with PMHC, compared to **64.8** for those without. This pattern reveals a critical relationship between mental and physical health during the perinatal period.

Trend in Severe Maternal Morbidity Rate per 10,000 Live Births by PMHC Status

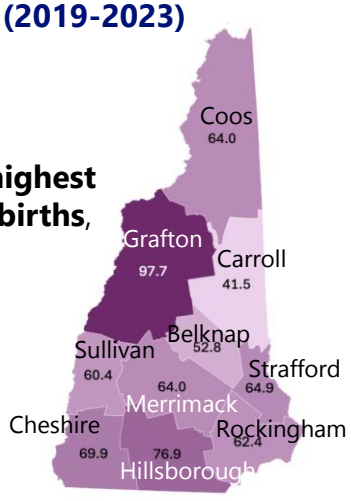


Racial differences in SMM are pronounced.

From 2016 to 2023**, Black or African American women experienced the highest SMM rate** at **127.1 per 10,000** live births, as compared to **Asian (76.1)**, and **White women (71.9) Other Race (63.6)** and **Refused/Unknown (71.1).**

SMM Rate by County (2019-2023)

County-level differences also show uneven distribution of maternal health risks. **Grafton** County reported the **highest SMM rate** at **97.7 per 10,000 births**, followed by **Hillsborough** and **Cheshire**. In contrast, **Carroll** County had t**he lowest rate**, suggesting varying levels of risk and healthcare access across the state.



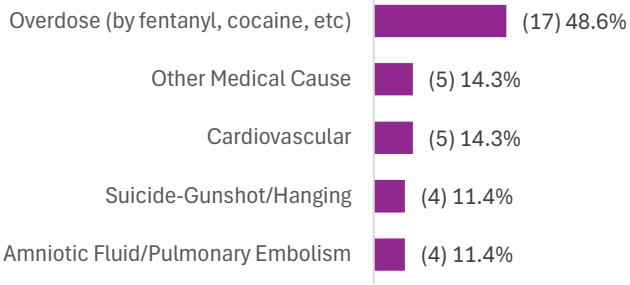
Data Sources: All data presented on this page is from NH Hospital Discharge Data

Key Maternal Health Indicators

Maternal Mortality

Pregnancy-associated death is a term for any death that occurs within one year of pregnancy, regardless of cause. From 2019-2023, **35** pregnancy-associated deaths were recorded in New Hampshire. Seventeen of these deaths (**48.6%)** were due to overdose by acute intoxication of fentanyl, cocaine, and other substances. **Five deaths** were due to **cardiovascular conditions.**

Leading Causes of Pregnancy-Associated Reviewed Deaths Occurring among NH Residents (2019-2023)

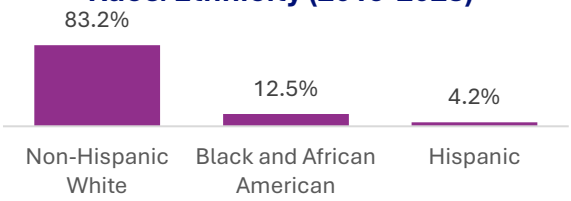


Pregnancy-related death is a term used for any death that occurs while pregnant up to one year from the end of pregnancy, for any cause relating to the pregnancy. **From 2019-2023**, **24 of the 35** pregnancy-associated deaths were determined to be pregnancy-related by the New Hampshire Maternal Mortality Review Panel commonly known as Maternal Mortality Review Committee (MMRC).

Drug overdose (50%) was also the leading cause of pregnancy-related death followed by **Cardiovascular and Amniotic Fluid Embolism.**

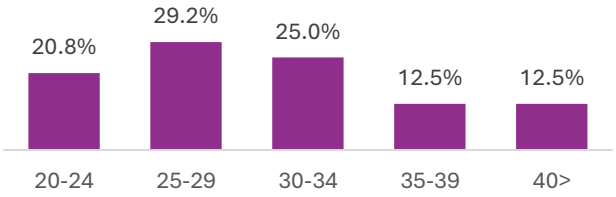
Most deaths occurred among non-Hispanic White women (83.2%), followed by **Black or African American** women and **Hispanic** women.

Pregnancy-related deaths by Race/Ethnicity (2019-2023)



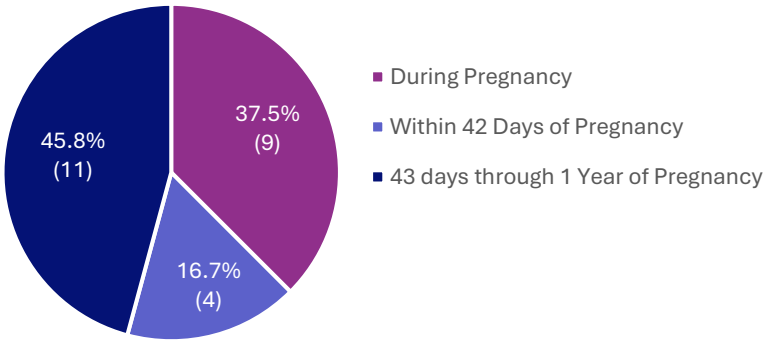
Pregnancy-related deaths also varied by the mother's age. The **highest percentage** of pregnancy-related deaths occurred among mothers between **25 and 29** years old.

Pregnancy-Related Deaths by Maternal Age (2019-2023)



The time at which each pregnancy-related death occurred varied. A majority **(62.5%)** of the pregnancy-related deaths occurred after pregnancy, during the **post-partum period.**

Pregnancy-Related Deaths by Timing of Death Relative to Pregnancy (2019-2023)



Pregnancy-related deaths also varied by principal payor. **Fifteen of the 24** pregnancy-related deaths occurred among women enrolled in Medicaid. The majority of the pregnancy-related deaths in women enrolled in Medicaid were due to drug-overdose **(73.3%)**.

62.5% of pregnancy-related deaths occurred in mothers enrolled in Medicaid.

For more detailed information on NH maternal mortality: Annual Maternal Mortality Report

Data Sources: All data presented on this page is from the Maternal Mortality Review Information Application

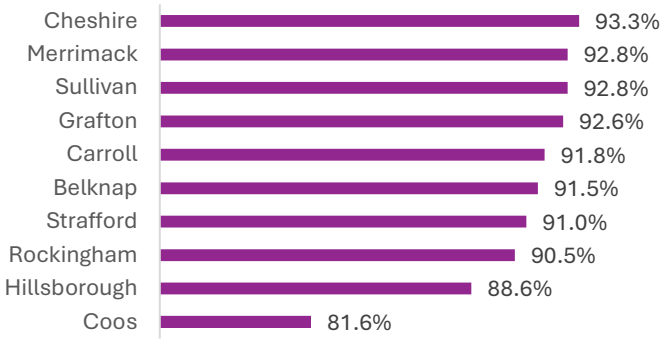
Key Maternal Health Indicators

Breastfeeding and Nulliparous, Term, Singleton, Vertex (NTSV) Cesarean Delivery

I. Breastfeeding

Increasing breastfeeding rates remains a key priority in maternal and child health. Overall, New Hampshire breastfeeding rates at discharge are high, with **90.4%** of women reported breastfeeding. In 2024, county-level breastfeeding rates at discharge ranged from **81.6%** in **Coos** County to **93.3%** in **Cheshire** County.

Prevalence of Breastfeeding at Discharge by County of Residence (2024)



78.0% of women breastfed for **more than eight weeks**, but **only 31.6%** reported exclusive breastfeeding for **six months.** (PRAMS 2022)

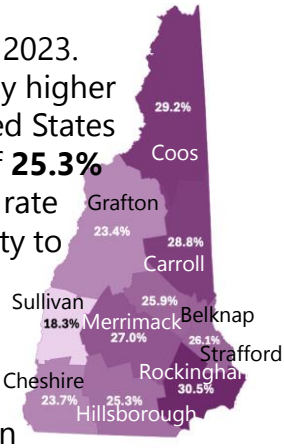
While initial breastfeeding rates at discharge are high, most women are not breastfeeding for the **6-month** duration recommended by health authorities such as the World Health Organization (WHO) and American Academy of Pediatrics (AAP). [4]

According to the National Survey of Children Health (2022-23), rates of exclusive breastfeeding for **6 months** were higher among women born outside the U.S. **(55%)**.[4] The lowest breastfeeding rates were reported among those with 2 or more adverse childhood experiences **(21.6%)**, high school graduates, Medicaid coverage **(20.4%)**, income near the poverty line **(24.0%)**, and women born in the U.S. **(23.9%)**.[5]

II. NTSV Cesarean Delivery

The NTSV cesarean rate measures the percentage of cesarean deliveries among births at low-risk for cesarean delivery. These low-risk births are Nulliparous (first-time mothers), Term (≥37 weeks), Singleton (one baby), Vertex (head-down) pregnancies. Cesarean delivery has risks including infection (e.g., Endometritis), blood clots, and opioid dependency.[6,7] High NTSV cesarean rates generally signal overuse of surgical intervention, thus are a measure of maternity care quality.

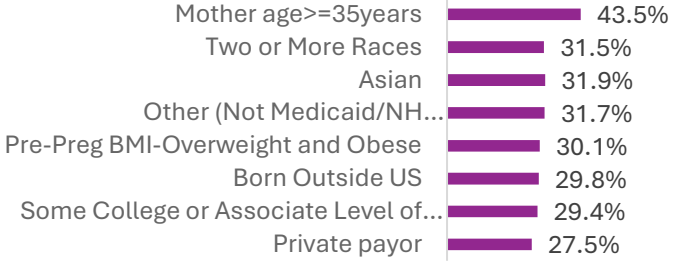
NTSV Cesarean Rate by County (2024)



In 2024, New Hampshire's overall **NTSV cesarean rate was 26.6%,** a decline from **27.5%** in 2023. New Hampshire tends to have slightly higher NTSV rates as compared to the United States as a whole, which had a NTSV rate of **25.3%** in 2024. [8] Regional variation in NTSV rate ranges from **18.3%** in **Sullivan** County to **30.5%** in **Rockingham** County.

Several characteristics were associated with higher NTSV cesarean rate. Notably, women **over age 35 years** had the **highest rate** at **43.5%.** Higher rates were seen among those identifying as **two or more Races (33.3%), Non-Hispanic Black (32.3%), pre-pregnancy overweight/obese** women, women **born outside the U.S.**, those with **private insurance**, and those with a **college-level education**. This highlights the interplay between clinical, demographic, and social factors that influence birth delivery method.

NTSV Cesarean Rate by Selected Characteristics (2024)



Data Sources: All data presented on this page is from NH Vital Records Birth Certificate Data

Conclusion and Recommendations

New Hampshire shows encouraging trends in certain maternal health outcomes, including high rates of early prenatal care and breastfeeding at hospital discharge. However, challenges remain, particularly related to variation among New Hampshire counties, insurance coverage, and maternal risk factors such as obesity, hypertension, mental health conditions, and substance use.

To improve maternal health outcomes across the state, the following actions are recommended:

- **Promote healthy weight and chronic disease prevention** before and during pregnancy through nutrition education and supportive programs.
- **Improve access to prenatal care** for women living in rural areas, covered by public insurance plans, and using substances.
- **Encourage earlier engagement with prenatal care** by strengthening outreach and support for women who are less likely to access care in the first trimester.
- **Increase early identification and management of PMHC and substance use**, with additional focus on areas with higher rates of these conditions, such as Sullivan and Coos counties.
- **Monitor behavioral health care services** received by women with PMHC and SUD following Medicaid extension 1 year postpartum.
- **Support continued breastfeeding beyond hospital discharge** by expanding lactation education and providing additional resources to families.
- **Continue efforts to reduce unnecessary cesarean deliveries**, particularly among groups with higher rates of NTSV cesarean delivery.

References

1. Healthy People 2030. Increase the proportion of pregnant women who receive early and adequate prenatal care — MICH-08. https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/increase-proportion-pregnant-women-who-receive-early-and-adequate-prenatal-care.
2. National Institutes of Health. What are the risk factors for preterm labor and birth? Accessed May 15, 2025. https://www.nichd.nih.gov/health/topics/preterm/conditioninfo/who_risk.
3. Seo N, Lee YM, Kim YJ, et al. Obesity Is Associated With Higher Risk of Adverse Maternal and Neonatal Outcomes Than Supervised Gestational Diabetes. J Korean Med Sci. 2023;38(33):e268. Published 2023 Aug 21. doi:10.3346/jkms.2023.38.e268.
4. CDC Infant and Toddler Nutrition. Breastfeeding Fast Facts. March 20, 2025. Accessed May 15, 2025. https://www.cdc.gov/infant-toddlernutrition/breastfeeding/index.html.
5. Child and Adolescent Health Measurement Initiative. 2022-2023 National Survey of Children's Health (NSCH). Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Accessed May 15, 2025. www.childhealthdata.org.
6. Mayo Clinic. C-section. https://www.mayoclinic.org/tests-procedures/c-section/about/pac-20393655
7. Bateman BT, Franklin JM, Bykov K, et al. Persistent opioid use following cesarean delivery: patterns and predictors among opioid-naïve women. *Am J Obstet Gynecol.* 2016;215(3):353.e1-353.e18. doi:10.1016/j.ajog.2016.03.016.
8. The Leapfrog Group. State of Maternity Care in U.S. Hospitals. Accessed May 15, 2025. https://www.leapfroggroup.org/sites/default/files/Files/MaternityCare-report-2025.pdf.

Summary of Data Sources:

- Maternal Mortality Review Information Application (MMRIA)
- NH Vital Birth Certificate Data
- NH Hospital Discharge Data

Links to Additional Resources:

- NH DHHS Maternal and Child Health Website
- 2024 NH Maternal Mortality Report
- State of Maternal Health Report
- Pregnancy Risk Assessment Monitoring System (PRAMS)

Acknowledgements

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