# Preventing Preterm Birth in Nebraska

***Maternal Child Health Topics in Nebraska***

*Preterm birth (defined as delivery before 37 weeks and 0/7 days of gestation) is the leading cause of infant morbidity and mortality in the United States.*[1] In 2018, 10.42% of births in Nebraska were preterm, compared to 10.02% in the United States.

Preterm birth is the leading cause of neonatal death and is associated with birth defects and long term health problems. Preterm birth may lead to lifelong problems such as:

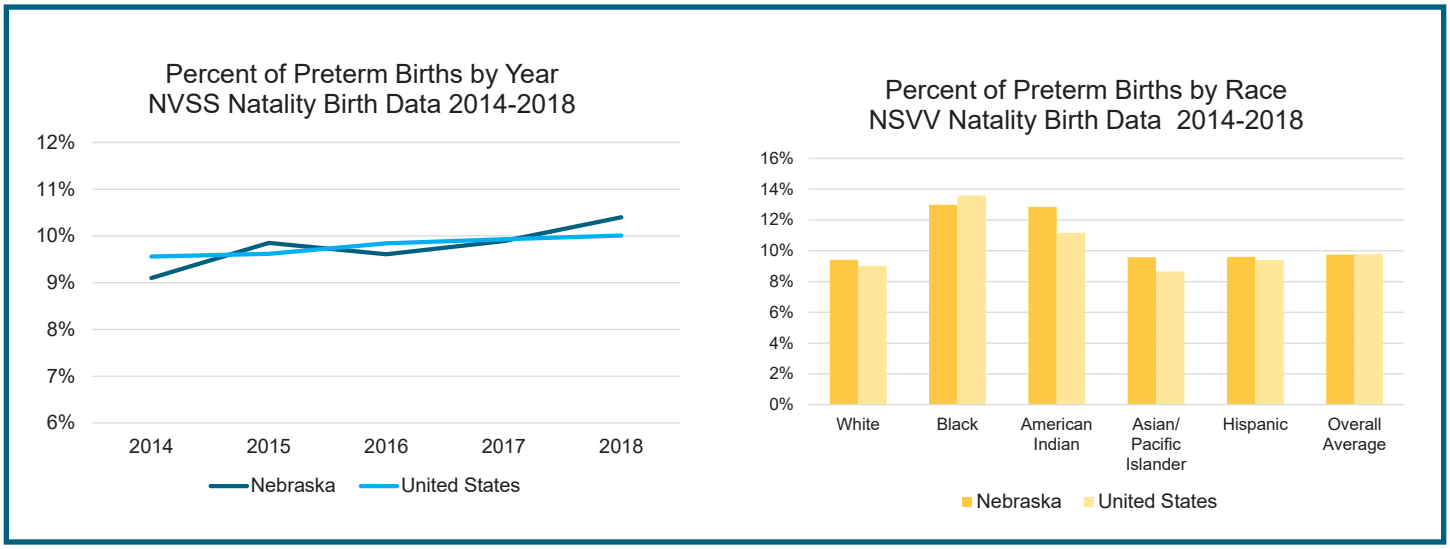
- Breathing problems
- Feeding difficulties
- Cerebral palsy
- Developmental delays
- Vision problems
- Hearing impairment

**There are risk factors for preterm birth, but <u>any</u> woman can have a preterm birth.**

## National Preterm Birth Goals

| Nebraska's Current Percent Preterm* | Healthy People 2020 Objective[2] | March of Dimes 2020 Prematurity Campaign[3] |
|---|---|---|
| 10.4% births were preterm in 2018 | 9.4% births or fewer are preterm | 8.1% births or fewer are preterm |

*Source: Nebraska Vital Records — 2017 and 2018 Combined




Source: Nebraska Vital Statistics System — Natality 2014-2018[4]

## In This Fact Sheet...

**UP NEXT**

Explore risk factors for preterm birth and data-driven actions to prevent preterm birth.

Reduce the risk of maternal and infant mortality and pregnancy-related complications by increasing access to quality care before pregnancy and between pregnancies.

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## Risk Factors for Preterm Birth[1]

**Maternal Demographics**
- Young or advanced maternal age
- Minority race/ethnicity
- Low socioeconomic status

**Unhealthy Lifestyle**
- Tobacco use
- Substance abuse
- Low or high pre-pregnancy body mass index

**Pregnancy History**
- Short interpregnancy interval
- Previous preterm delivery

**Pregnancy Complications**
- Placental abruption or previa
- Polyhydramnios
- Oligohydramnios
- Multiple gestations

**Maternal Medical Disorders**
- Thyroid disease
- Obesity
- Asthma
- Diabetes
- Hypertension

**Intrauterine Infection**

**Mental Health**
- Psychological or social stress
- Depression

**Fertility Treatments**
- Assisted reproductive technology (ART)
- Non-ART fertility treatments

## Maternal Demographics

**Table 1: Characteristics of Mothers with a Recent Live Birth**

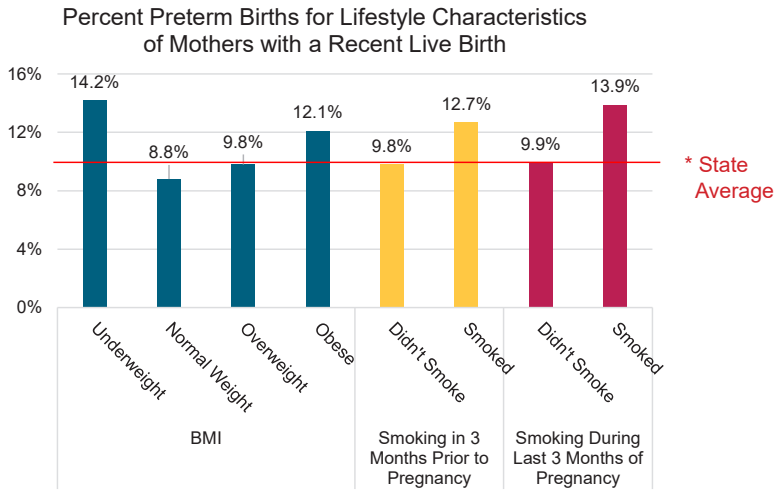
| | % Preterm | % of Population |
|---|---|---|
| **By Race/Ethnicity[A]** | | |
| White | 9.8% | 69.6% |
| Black | 12.8% | 7.6% |
| Native American | 15.0% | 2.1% |
| Asian/Pacific Islander | 9.9% | 4.0% |
| Hispanic | 9.8% | 16.7% |
| **By Income[B]** | | |
| Income less than 194% Federal Poverty Level | 8.3% | 50.4% |
| Income more than 194% Federal Poverty Level | 7.1% | 49.6% |
| **By Education[A]** | | |
| Less than High School Education | 11.8% | 12.1% |
| High School Education | 10.9% | 19.1% |
| Some College Education | 10.4% | 31.8% |
| College Degree or More Education | 9.0% | 36.9% |
| **By Age[A]** | | |
| Under 20 Years | 9.5% | 4.4% |
| 20-24 Years | 8.4% | 18.5% |
| 25-29 Years | 6.9% | 32.6% |
| 30-34 Years | 7.9% | 29.7% |
| 35-39 Years | 10.1% | 12.6% |
| 40 or More Years | 11.3% | 2.3% |

Sources: A – Nebraska Vital Records — 2017 and 2018 Combined and B – Nebraska PRAMS — 2017 and 2018 Combined

### Call to Action

- Some demographic groups have a higher risk of preterm birth. Educate patients within these groups about their higher risk of preterm birth, the signs of early labor and encourage them to seek medical help.
- Target interventions at the social determinants of health to reduce risk for preterm birth for these groups.
- Screen for social needs during every visit. A *recommended screening tool is the American Academy of Family Physicians "Social Needs Screening Tool"*.
- Educate patients on optimal pregnancy timing and risks associated with preterm birth as patients develop their reproductive life plan.

## Unhealthy Lifestyle




Source: Nebraska Vital Records — 2017 and 2018 Combined

### Call to Action

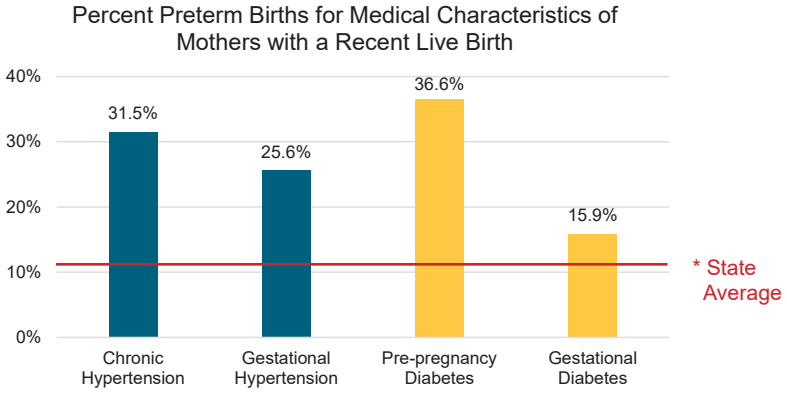
- Encourage patients to take action to get healthy, by quitting smoking and obtaining a healthy weight, before becoming pregnant.

## Pregnancy History

- Having a previous preterm birth increases the likelihood of future preterm births.
- The recommended interpregnancy interval is 18 months between pregnancies.[5]
- In Nebraska, 62.6% of women with twins, triplets, or more have a preterm birth, compared to 8% of women with single births (Nebraska Vital Records — 2017 and 2018 Combined).

- Discuss women's reproductive plans for the next year during each visit.
- Encourage patients to develop a reproductive life plan to optimize pregnancy spacing.
- Discuss LARC use with patients as a first line to prevent close interval pregnancies.

## Maternal Medical Disorders

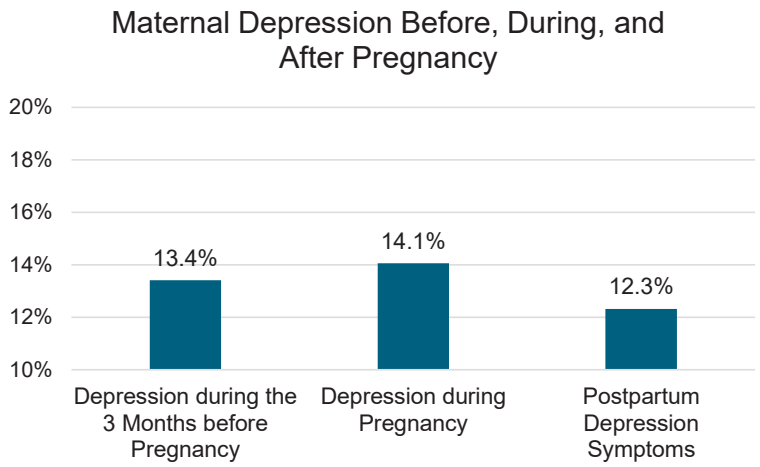



Source: Nebraska Vital Records — 2017 and 2018 Combined

- Discuss women's reproductive plans for the next year during each visit with chronic disease providers.
- Educate women about the implications of a pregnancy with her disease.
- Enlist specialists to help her optimize her health prior to and during pregnancy.

## Mental Health

Women experiencing depression or psychological stress are at an increased risk of preterm birth.




Source: Nebraska PRAMS — 2017 and 2018 Combined

### Call to Action

- Screen all patients for depression and anxiety during prenatal care. Refer for treatment as needed.

Uptodate.com provides promising initiatives to reduce preterm births.[6]


Women who experience multiple stressful life events are at increased risk of having a preterm birth, low birth weight baby, or postpartum depressive symptoms.[7,8] Social stressor and trauma screenings need to be used with every family and referrals for services made when appropriate.[8] Prenatal care appointments provide providers with opportunities to provide these screenings and referrals.


References:

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3. March of Dimes. (n.d.). 2018 Premature Birth Report Card. Retrieved from https://www.marchofdimes.org/peristats/tools/reportcard.aspx?frmodrc=1%u00c2%u00ae=31.
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5. March of Dimes. (n.d.). How Long Should You Wait Before Getting Pregnant Again? Retrieved from https://www.marchofdimes.org/pregnancy/how-long-should-you-wait-before-getting-pregnant-again.aspx.
6. UpToDate. (n.d.). Preterm birth: Risk factors, interventions for risk reduction, and maternal prognosis. . Retrieved November 15, 2019, from https://www.uptodate.com/contents/preterm-birth-risk-factors-interventions-for-risk-reduction-and-maternal-prognosis?search=preterm birth&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1.
7. Salm Ward, T., Kanu, F. A., & Robb, S. W. (2017). Prevalence of stressful life events during pregnancy and its association with postpartum depressive symptoms. Arch Womens Ment Health, 20(1), 161–171. doi: 10.1007/s00737-016-0689-2
8. Koning, S. M., & Ehrenthal, D. B. (2019). Stressor landscapes, birth weight, and prematurity at the intersection of race and income: Elucidating birth contexts through patterned life events. SSM - Population Health, 8, 100460. doi: 10.1016/j.ssmph.2019.100460


### ***Featured Data Sources***

**National Vital Statistics System—Natality** collects and disseminates the Nation's official vital statistics within the United States. Birth data from 2013-2017 were used in this fact sheet.

**Nebraska Vital Records** contains a record of all births that occur in Nebraska. For this fact sheet, data on births to Nebraska residents for 2017-2018 were utilized.

**Nebraska Pregnancy Risk Assessment Monitoring System (PRAMS)** is an ongoing population-based surveillance system of maternal behavior and experiences before, during, and shortly after pregnancy. The data presented in this publication are based on **2,569** completed surveys representing Nebraska mothers who gave birth to live infants between 2017-2018. PRAMS data is self-reported.

**For more information, visit www.dhhs.ne.gov/PRAMS**