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. 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 any woman can have a preterm birth.

National Preterm Birth Goals

<table>
<thead>
<tr>
<th>Nebraska's Current Percent Preterm*</th>
<th>Healthy People 2020 Objective</th>
<th>March of Dimes 2020 Prematurity Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.4% births were preterm in 2018</td>
<td>9.4% births or fewer are preterm</td>
<td>8.1% births or fewer are preterm</td>
</tr>
</tbody>
</table>

*Source: Nebraska Vital Records — 2017 and 2018 Combined

In This Fact Sheet...

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.
Risk Factors for Preterm Birth

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

Table 1: Characteristics of Mothers with a Recent Live Birth

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

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

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).

Maternal Medical Disorders

- 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.

Preventing Preterm Birth in Nebraska
Mental Health

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

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

Maternal Depression Before, During, and After Pregnancy

<table>
<thead>
<tr>
<th>Depression during the 3 Months before Pregnancy</th>
<th>Depression during Pregnancy</th>
<th>Postpartum Depression Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.4%</td>
<td>14.1%</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

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:


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