



PRAMS and...

Preconception Health

Summer 2012

Why is preconception health important?

Assuring the health of women across their lifespan and particularly before pregnancy is an important key to improving birth outcomes. While prenatal care is necessary, there are two underlying reasons why prenatal care by itself is not sufficient:

- **Many risk factors** (such as inadequate folic acid intake and exposure to alcohol and tobacco) **have an impact during the first few weeks of pregnancy**, before prenatal care begins, and often before the woman even knows she is pregnant.
- **Some important health risks** such as hypertension, obesity, and smoking **should be addressed before conception**, because they are *not easy to resolve quickly* before they could affect the growth and development of the baby, as well as the health of the woman during the pregnancy.¹

What is Nebraska PRAMS?

The Nebraska Pregnancy Risk Assessment Monitoring System is an ongoing population-based surveillance system of maternal behaviors and experiences before, during, and after pregnancy. Nebraska PRAMS is a joint research project between the Nebraska Department of Health and Human Services and the United States Centers for Disease Control and Prevention (CDC). The data presented in this publication are based on 8,516 completed surveys that represent 127,956 Nebraska mothers who gave birth to live infants during 2004 through 2008.

Who needs to improve their health before pregnancy in Nebraska?

- 11% of women who reported having a *previous* preterm birth, which is the single strongest predictor of having a preterm birth in subsequent pregnancies.
- 26% of women who smoked cigarettes before their pregnancy and 15% of women who were still smoking at the end of their pregnancy.
- 61% of women who drank alcohol before their pregnancy and 27% of women who reported binge drinking (5 or more drinks in one sitting).
- 19% of women who were obese and 24% of women who were overweight when they learned of their pregnancy.
- 1.6% of women who reported being diabetic.
- 68% of women who had inadequate folic acid intake before their pregnancy.

Nearly every woman in Nebraska could do at least one thing to improve her health before she becomes pregnant!

Quick Facts PRAMS 2004-2008

- **4 out of 5 Nebraska women don't know they are pregnant until the fourth week of pregnancy or later** (i.e. with a pregnancy test). This means that a woman's health and lifestyle choices just before becoming pregnant are likely to remain about the same during the first few weeks of pregnancy, one of the most critical development periods for the baby.
- **Only 6 out of 10 women in Nebraska intended to become pregnant.** This means that more than 40% of women who became pregnant were not prepared and faced higher risks for a poor birth outcome² (i.e. low birth weight, preterm birth, birth defects, pregnancy loss, or infant death).³

Throughout this fact sheet you will find: 1) **Healthy People (HP) 2020 goals.** HP 2020 provides science-based, 10-year national objectives for improving the health of all Americans. Some of the topics in this fact sheet relate to these goals so you can see how Nebraska compares. You can find more information about HP2020 at healthypeople.gov

2) **Racial/ethnic disparities** are large and the effect of race/ethnicity is statistically significant for every indicator in this report with p-value less than .01. (A small p-value indicates that the disparity is less likely to be attributed to chance.)

3) **Statements that include the phrase "statistically significant"** means that the p-value is less than .05, and the difference is more than expected due to random variation.

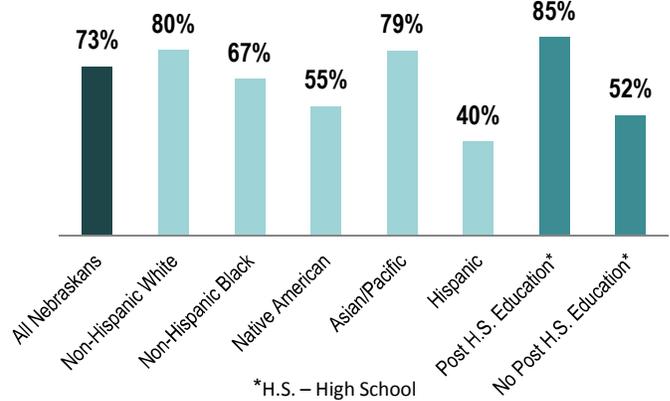
Planning Pregnancies Can Improve Preconception Health

Measuring Preconception Health

The indicators of preconception health in this report are drawn from the Core State Preconception Health Indicators⁴, which were defined and recommended under the support of the CDC Select Panel in Preconception Health.³ The complete list of preconception health domains and indicators can be found on the Council of State and Territorial Epidemiologists (CSTE) website.⁵

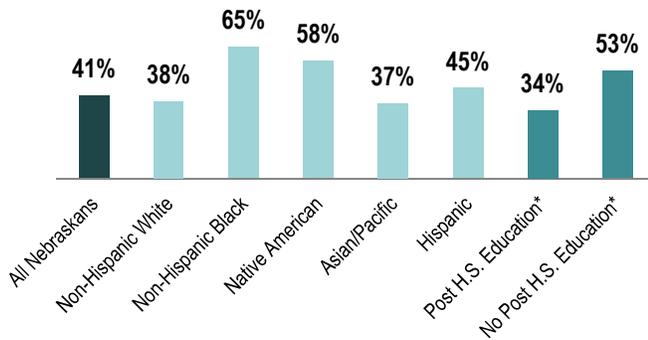
Health Insurance Coverage (including Medicaid) before pregnancy

Nebraska PRAMS 2004-2008



Unintended Pregnancy

Nebraska PRAMS 2004-2008



Having private health insurance or Medicaid (public health insurance) coverage can help women plan healthy pregnancies. Hispanics, Native Americans, and women with only a high school education or less are least likely to have health coverage. There was no significant trend during this time. **HP2020 AHS-1.1 Medical Insurance: Increase the proportion of persons with health insurance. Target=100%.**

A pregnancy is defined as unintended if the mother reported she wanted to be pregnant later or never. Non-Hispanic Blacks, Native Americans, and women with only a high school education or less were most likely to report their pregnancy was unintended.

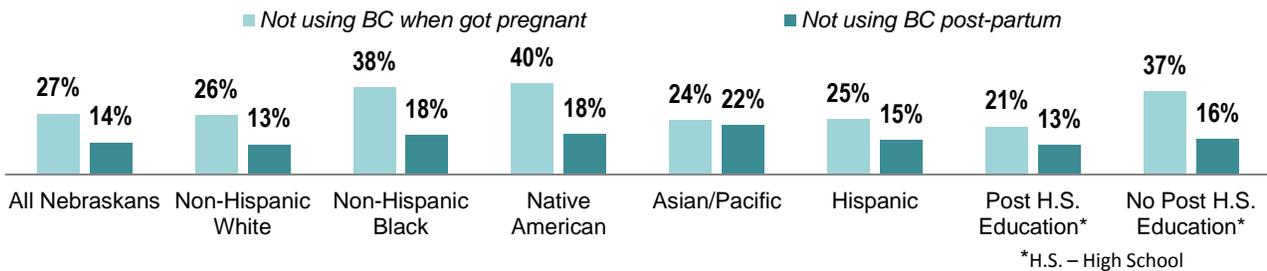
Unintendedness decreased overall from 44% in 2004 to 40% in 2005-2007.

Measuring Socioeconomic Status (SES)

Socioeconomic status and poverty are difficult concepts to measure. In this report we follow common practice in using the **mother's educational attainment** as recorded in the birth certificate as a "proxy" for socioeconomic status. In general, it reflects wealth and predicts earning potential, both of which contribute to health. **Disparities in educational attainment are statistically significant** for every indicator in this report except overweight/obesity.

Use of Birth Control Among Women Not Trying to get Pregnant

Nebraska PRAMS 2004-2008

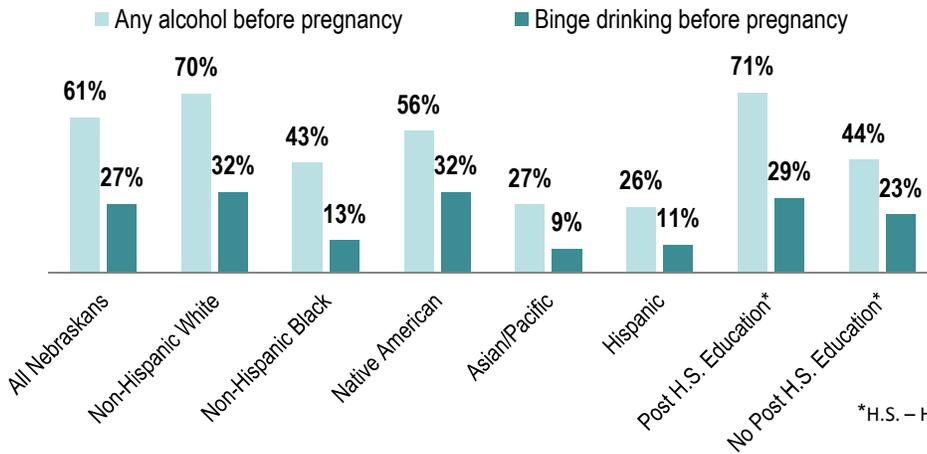


Native Americans and non-Hispanic Blacks were least likely to be using birth control at the time they became pregnant, and Asian mothers were least likely to be using birth control postpartum. Postpartum contraception is important because it affects the health of the next pregnancy (interconception health). **Pre-pregnancy birth control use decreased significantly overall from 28% in 2004 to 23% in 2008.** Post partum birth control use did not change significantly during this time.

Tobacco and Alcohol Use Influences Birth Outcomes

Alcohol use during the three months before pregnancy

Nebraska PRAMS 2004-2008



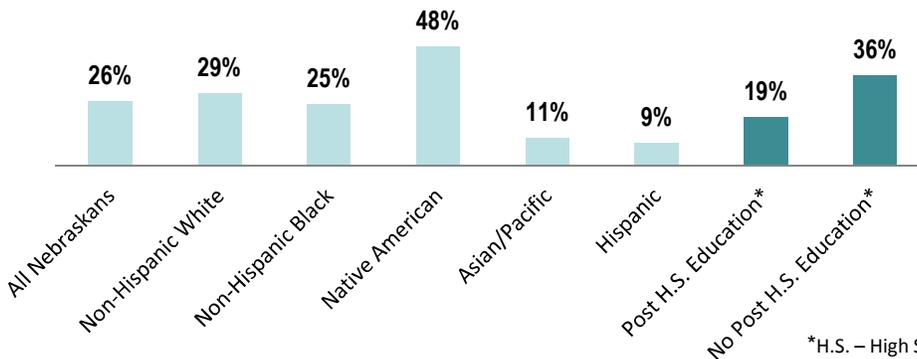
The racial/ethnic and education disparities shown here are statistically significant. The highest rates of drinking any alcohol are found among non-Hispanic White women and women with post-high school education. The highest rates of binge drinking were found among non-Hispanic Whites and Native Americans. These rates stayed nearly constant during 2004-2008.

*H.S. – High School

HP2020 SA-14.3 Reduce the proportion of persons engaging in binge drinking during the past 30 days—Adults age 18 years and older. Target = 24.3%. Not directly comparable, but improving the PRAMS outcome would also help NE achieve the HP2020 goal.

Cigarette smoking during the three months before pregnancy

Nebraska PRAMS 2004-2008



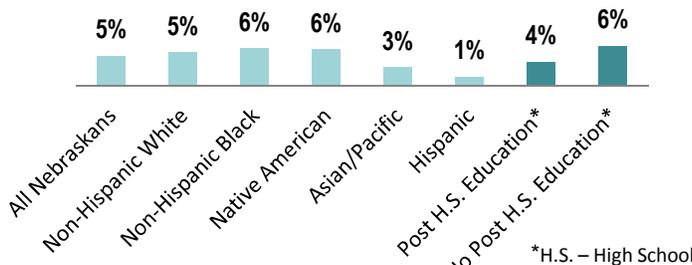
The racial/ethnic and education disparities shown here are statistically significant. The highest rates of smoking are found among Native American women, and the lowest among Asian/Pacific and Hispanic women. There is no significant trend overall during this time.

*H.S. – High School

HP2020 TU-1.1 Reduce tobacco use by adults. Target =12.0%. Not directly comparable, but improving the PRAMS outcome would also help NE achieve the HP2020 goal.

Exposing the newborn to cigarette smoke any number of hours per day

Nebraska PRAMS 2004-2008



*H.S. – High School

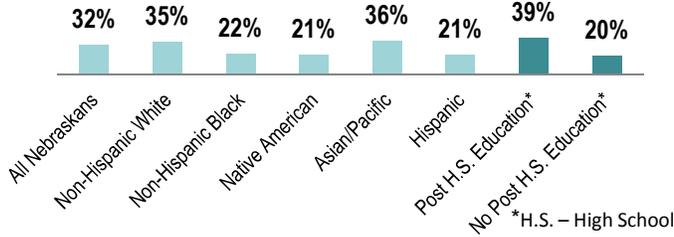
The lowest rates of infant exposure to smoke were among Asian/Pacific, Hispanic, and more educated mothers. Although non-Hispanic Black mothers are less likely to smoke than mothers overall, their newborns are more likely to be exposed to smoke.

Though cigarette smoking did not decrease during 2004-2008, exposure of the newborn to cigarette smoke decreased significantly overall for both education levels, and among non-Hispanic White, non-Hispanic Black and Hispanic mothers. This is an indication that mothers and other caregivers are increasingly aware of the dangers cigarette smoke poses for infants.

Health care providers can help women improve their health and reduce their risks for poor birth outcomes

Taking a vitamin containing folic acid daily before pregnancy

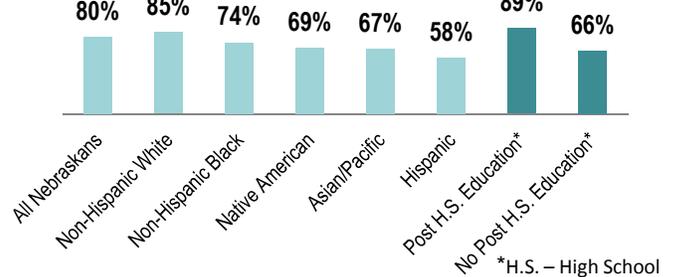
Nebraska PRAMS 2004-2008



The lowest rates of taking folic acid daily were found among non-Hispanic Blacks, Hispanics, Native American women, and women with a high school education or less. There was no significant trend overall during this time. **HP2020 MICH-16.2 Took multivitamins/folic acid prior to pregnancy. Target = 33.1%.**

Teeth were cleaned by a dental care provider before pregnancy

Nebraska PRAMS 2004-2008

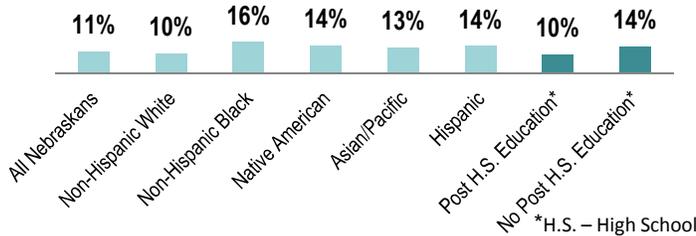


The lowest rates of dental care were found among Hispanic women. There was a **significant increase overall** from 76% in 2004 to 84% in 2008. Only non-Hispanic Blacks did not experience an increase during this time.

Previous preterm birth

(last child born more than 3 weeks before due date)

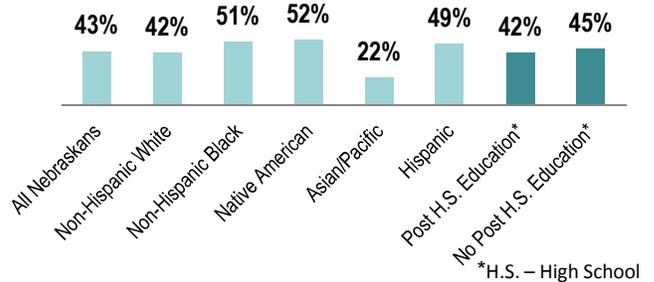
Nebraska PRAMS 2004-2008



Having a previous preterm birth is a strong indicator of risk for another one. Non-Hispanic Black women report the highest rates of previous preterm births. There was no significant trend overall during this time. **HP2020 MICH-9.1 Reduce overall preterm birth rates. Target =11.4%.**

Overweight or obese (BMI ≥ 25)** when became pregnant

Nebraska PRAMS 2004-2008



**BMI = Body Mass Index

High rates of overweight and obesity were found among all groups of women. There was an increase overall from 41% in 2004 to 46% in 2008, but this trend has not yet reached statistical significance. This increase was due primarily to an increase in prevalence of overweight; obesity rates remained constant.

References:

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- Nebraska Department of Health and Human Services. Unintended Pregnancy Fact Sheet (December 2010). Available at http://dhhs.ne.gov/publichealth/Pages/prams_reports.aspx.
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- Matern Child Health J. 2011;15(2):158-168. Core State Preconception Health Indicators: A Voluntary, Multi-state Selection Process. Broussard DL, Sappenfield WB, Fussman C, Kroelinger CD, Grigorescu V.
- <http://www.cste.org/dnn/ProgramsandActivities/ChronicDiseaseMCHandOralHealth/MCHIndicators/tabid/337/Agg1378>SelectTab>

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