



Folic Acid Use Before Pregnancy

Among New Hampshire Women Who Gave Birth in 2013 and 2014

The New Hampshire Pregnancy Risk Assessment Monitoring System (NH PRAMS) collects data on a variety of topics related to maternal health. This report is based on PRAMS survey data collected from NH residents who gave birth in 2013 and 2014. For more information on NH PRAMS and to access the complete 2013 and 2014 NH PRAMS Data Books and other publications visit: <http://www.dhhs.nh.gov/dphs/bchs/mch/prams.htm>

Folic Acid and Prevention of Birth Defects

The Centers for Disease Control and Prevention (CDC) and the American Congress of Obstetricians and Gynecologists (ACOG) recommend that all women of child-bearing age consume 400mcg of folic acid daily. Also known as folate, folic acid is a B vitamin which when taken before and during pregnancy decreases the risk of serious neural tube defects (NTDs), birth conditions of the brain and spine that can be fatal or extremely disabling. NTDs occur very early in a pregnancy as the brain and spinal cord develop and when most women do not know that they are pregnant. With 39% of pregnancies in New Hampshire unintended during 2013-2014, it is important that all women between ages 15 and 45 consume the recommended dose of folic acid daily. CDC estimates that this could prevent most NTDs, reducing the risk by half to 70%¹

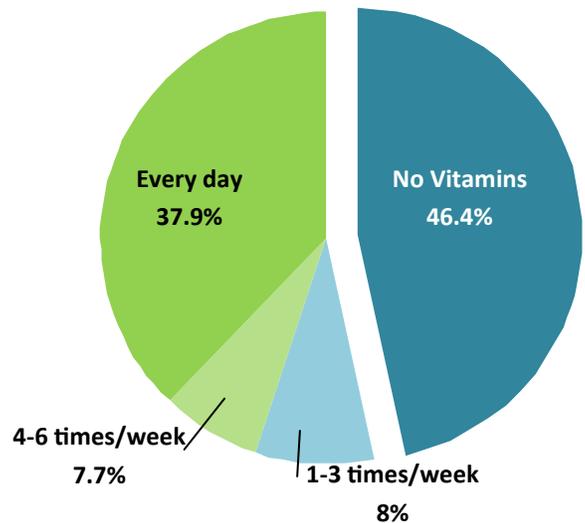
PRAMS and Folic Acid

New Hampshire PRAMS samples approximately 1000 resident women who give birth each year. The data is weighted by CDC to reflect the entire population of New Hampshire women who gave birth. Survey questions cover a variety of important topics related to pregnancy. This report is based on 2013 and 2014 data related to folic acid use and associated maternal characteristics. New Hampshire PRAMS collects state-specific data on multivitamin/folic acid consumption with the following question:

During the month before you got pregnant with your new baby, how many times a week did you take a multivitamin, a prenatal vitamin, or a folic acid vitamin?

- a. I didn't take a multivitamin, prenatal vitamin, or folic acid vitamin in the month before I got pregnant
- b. 1 to 3 times a week
- c. 4 to 6 times a week,
- d. every day of the week

Multivitamin, prenatal vitamin, or folic acid consumption during the month prior to pregnancy
NH PRAMS 2013-2014



Almost 1/2 of New Hampshire resident women who gave birth during 2013 –2014 were not taking any vitamin supplements in the month before becoming pregnant.

- Neural tube defects (NTDs), severe abnormalities of the brain and spinal cord, develop in the first few weeks of pregnancy before most women know they are pregnant.
- In New Hampshire 39% of pregnancies were unintended during 2013-2014.
- Each year NTDs affect approximately 3000 pregnancies in the U.S.

Taking 400 mcg of folic acid daily before and during pregnancy can reduce the risk of neural tube defects by half to 70%.

Percent of NH residents who gave birth and who took a multivitamin, prenatal vitamin, or folic acid vitamin at least 4 times per week during the month before getting pregnant by maternal characteristics

NH PRAMS 2013-2014

Characteristic **% taking vitamins 4 or more times per week before pregnancy**

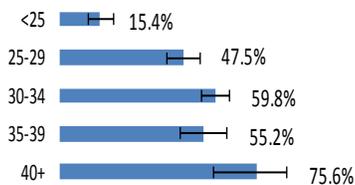
Pregnancy intention



Talked with provider about improving health pre-pregnancy



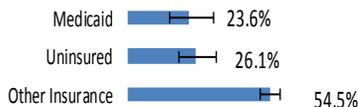
Maternal age in years



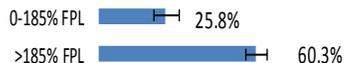
Education



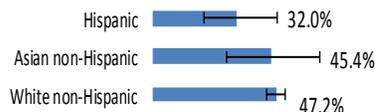
Insurance just before pregnancy



Income— % Federal Poverty Level



Race & Ethnicity*



* Other race and ethnic groups too small to report reliable estimates

— 95% confidence interval

Preconception Folic Acid Use in New Hampshire 2013-2014

While New Hampshire exceeds the Healthy People 2020 goal for increasing the percent of women with a daily folic acid consumption of 400mcg in the month before pregnancy to 33.3%, NH PRAMS data show that each year more than 5500 women in the state are not taking vitamins just before pregnancy.^{2,3} This highlights the opportunities for providers and others to reach out to certain populations in order to increase folic acid consumption and decrease the risk of neural tube defects across the entire population.

- The percentage of women with an unintended pregnancy who took vitamins 4 or more times per week was less than half that of those whose pregnancy was intended (24.8% vs. 58.9%).
- Proportionately more than twice as many NH residents who spoke to a health care provider about improving their health before pregnancy took vitamins 4 or more times per week during the month before pregnancy than those who did not have this conversation with a health care provider (76% vs. 35.8%).
- Of all age groups, women less than 25 years of age were the least likely to take vitamins 4 or more times per week (15.4%) while women 40 years of age or older were the most likely (75.6%).
- The percentage of women with an education greater than 12 years who took vitamins at least 4 times per week was more than twice that of women with an education of 12 years or less (54.1% vs. 25.3%).
- The percentage of women on Medicaid or who were uninsured before pregnancy and who took vitamins at least 4 times per week was less than half that of those on other insurance (23.6% and 26.1% vs. 54.5%).
- The percentage of women with a household income >185% FPL who took vitamins at least 4 times per week was more than twice that of those whose income was 0-185% of the FPL (60.3% vs. 25.8%).

References:

- <https://www.cdc.gov/ncbddd/folicacid/data.html>
- <https://www.healthypeople.gov/2020/>
- <http://www.dhhs.nh.gov/dphs/bchs/mch/prams.htm>

About NH PRAMS

The Pregnancy Risk Assessment Monitoring System, PRAMS, is an ongoing population based surveillance project of the CDC and state departments of health, with the goals of reducing infant mortality and low birth weight and improving the overall health of mothers and infants. New Hampshire PRAMS was funded in 2011 by the CDC and began collecting data in 2013. Funding for NH PRAMS was provided by the Centers for Disease Control and Prevention under grant #U01DP003156. Contents of this publication do not necessarily represent the official views of the CDC.

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