

# New Mexico Epidemiology

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## Preconception Health Indicators by Age Group and Race/ethnicity in New Mexico, 2016-2018

Preconception health care is important to improve pregnancy and birth outcomes for both the mother and her infant. Many maternal behaviors and chronic conditions that are associated with unfavorable pregnancy outcomes can be addressed before pregnancy. Women who smoke have more difficulty becoming pregnant, and smoking during pregnancy increases the risk of preterm birth and low birth weight infants.<sup>1</sup> Drinking alcohol in early pregnancy can cause preterm birth, a low birth weight infant, brain damage and birth defects.<sup>2</sup> Women with diabetes before pregnancy have increased risk for miscarriages, still birth, high birth weight babies and other issues.<sup>3</sup> Hypertension before pregnancy is associated with a higher risk of preeclampsia and eclampsia.<sup>4</sup> Women with pre-pregnancy depression are at increased risk of postpartum depression. Maternal obesity increases the risk of hypertension during pregnancy and cesarean delivery.<sup>5</sup>

### Methods

Data from the New Mexico Pregnancy Risk Assessment Monitoring System (NM PRAMS) survey for 2016-2018 were utilized to examine preconception health indicators. PRAMS is an ongoing public health surveillance system of maternal behaviors and experiences before, during and shortly after pregnancy. NM resident women who recently gave birth in NM were randomly selected to participate in the survey. The preconception indicators in this report were selected from a list of preconception health indicators developed by a volunteer group of policy and program leaders and epidemiologists in seven states<sup>6</sup> based on their availability in the PRAMS survey with one exception: pre-pregnancy depression was used instead of the postpartum depression indicator. Mothers aged 18 to 44 years were included in the analysis. The preconception indicators were analyzed by age group and race/ethnicity. White race/ethnicity refers to only non-Hispanic White women.

### Results

*Health Care Insurance Coverage during the Month before Pregnancy.* Overall, 87.9% (95% CI: 86.8-89.0) of women reported having health insurance coverage

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during the month before pregnancy. The percentage of women who had preconception health insurance did not vary significantly by age group. Specifically, 85.5% of women aged 18-24 years reported health insurance coverage compared with 89.7% of women aged 25-34 years and 85.8% of women aged 35-44 years. American Indian women (96.9% [95% CI: 95.2-98.6]) were significantly more likely to report preconception health insurance coverage than White women (93.0% [95% CI: 91.2-94.9]) and Hispanic women (82.8% [95% CI: 81.0-84.5]).

*Routine Checkup during the 12 Months before Pregnancy.* Overall, 76.2% (95% CI: 74.2-78.2) of women reported having a regular checkup at the family doctor's office or at the OB/GYN's office during the year prior to pregnancy. The percentage of women who had a routine checkup did not vary significantly by age group or race/ethnicity. Specifically, 72.6% of women aged 18-24 years reported a routine checkup compared with 77.4% of women aged 25-34 years, and 77.3% of women aged 35-44 years. In addition, 78.6% of Hispanic women reported a routine checkup compared with 74.7% of American Indian women and 73.6% of White women.

*Teeth Cleaned during the 12 Months before Pregnancy.* Overall, 66.5% (95% CI: 64.3-68.8) of women reported having their teeth cleaned by a dentist or dental hygienist during the year prior to pregnancy. The percentage of women who had their teeth cleaned did not vary significantly by age group or race/ethnicity. Specifically, 64.3% of women aged 18-24 years reported having their teeth cleaned compared with 67.1% of women aged 25-34 years and 67.7% of women aged 35-44 years. In addition, 65.8% of Hispanic women reported having their teeth cleaned compared with 65.6% of American Indian women and 67.2% of White women.

*Unintended Pregnancy.* Unintended pregnancy was defined as a pregnancy that was not wanted then or at any time in the future. Overall, 23.3% (95% CI: 21.8-24.8) of women thinking back to just before their pregnancy reported an unintended pregnancy and 19.6% (95% CI: 18.2-21.1) were unsure of what they wanted. Women aged 18-24 years (32.0%, [CI:29.0-35.1]) were significantly more likely to report an unintended pregnancy than women aged 25-34 years (20.2%, [CI: 18.3-22.1]) and women aged 35-44 years (16.7%, [CI: 13.2-20.1]). The percentage of women who had an unintended pregnancy did not vary significantly by race/ethnicity. Specifically, 25.2% of Hispanic women reported that their pregnancy was unintended compared with 19.6% of American Indian women and 21.2% of White women.

*Smoking before Pregnancy.* Overall, 16.3% (95% CI: 15.0-17.6) of women smoked cigarettes during the 3 months before pregnancy. Women aged 18-24 years (18.3% [CI: 15.9-20.8]) were significantly more likely to smoke cigarettes compared to women aged 35-44 years (12.5%, [95% CI: 9.4-15.6]). The prevalence of smoking among women aged 25-34 years was 16.2% ((95% CI: 14.5-17.9)). The percentage of women who smoked during the 3 months before pregnancy did not vary significantly by race/ethnicity. Specifically, 15.6% of Hispanic women reported smoking compared with 13.0% of American Indian women and 18.6% of White women.

*Drinking Alcohol before Pregnancy.* Overall, 50.4% (95% CI: 48.7-52.1) of women drank alcohol during the 3 months before pregnancy. The percentage of women who drank alcohol during the 3 months before pregnancy did not vary significantly by age group. Specifically, 42.6% of women aged 18-24 years drank alcohol compared with 54.6% of women aged 25-34 years and 50.0% of women aged 35-44 years. The percentage of women who drank alcohol during the 3 months before pregnancy varied significantly by race/ethnicity. Specifically, 63.2% (95% CI: 60.1-66.4) of White women reported alcohol use compared with 47.1% (95% CI: 44.8-49.5) of Hispanic women and 34.2% (95% CI: 29.4-39.0) of American Indian women.

*Overweight (Body Mass Index of 25.0-29.9).* Overall, 28.1% (95% CI: 26.5-29.7) of women were overweight just before pregnancy. The percentage of women who were overweight just before pregnancy did not vary significantly by age group. Specifically, 28.6% of women aged 18-24 years were overweight

compared with 27.6 % of women aged 25-34 years and 28.7% of women aged 35-44 years. The percentage of women who were overweight varied significantly by race/ethnicity. American Indian women and Hispanic women had significantly higher prevalence of being overweight than White women. Specifically, 32.9% (95% CI: 28.2-37.7) of American Indian women were overweight compared to 30.4% (95% CI: 28.2-32.7) of Hispanic women and 22.0% (95% CI: 19.3-24.7) of White women.

*Obesity (Body Mass Index of 30.0+).* Overall, 26.5% (95% CI: 24.9-28.1) of women were obese just before pregnancy. Women aged 18-24 (20.9%, [95% CI: 18.1-23.6]) were significantly less likely to be obese just before pregnancy than women aged 25-34 years (29.1%, [95% CI: 26.9-31.2]) and women aged 35-44 years (28.0%, [95% CI: 23.9-32.2]). The percentage of women who were obese just before pregnancy varied significantly by race/ethnicity. Specifically, 37.9% (95% CI: 33.0-42.9) of American Indian women were obese compared to 27.0% (95% CI: 24.8-29.1) of Hispanic women and 21.8% (95% CI: 19.1-24.5) of White women.

*Vitamin supplementation during the Month before Pregnancy.* Overall, 33.4% (95% CI: 31.8-35.0) of women took a multivitamin, prenatal vitamin or folic acid vitamin every day of the week during the month before pregnancy. The percentage of women taking a vitamin supplement containing folic acid varied significantly by age group and race/ethnicity. Specifically, 42.6% (95% CI: 38.2-47.1) of women aged 35-44 years reported taking a supplement containing folic acid compared to 35.2% (95% CI: 33.0-37.4) of women aged 25-34 years and 25.8% (95% CI: 22.9-28.6) of women aged 18-24 years. In addition, White women (41.8% [95% CI: 38.6-44.9]) were significantly more likely to report taking a supplement containing folic acid compared to 29.7% (95% CI: 27.6-31.9) of Hispanic women and 27.6% (95% CI: 23.2-32.0) of American Indian women.

*Depression during the 3 Months before Pregnancy.* Overall, 11.6% (95% CI: 10.5-12.7) of women reported having depression before pregnancy. The percentage of women who had depression before pregnancy did not vary significantly by age group. Specifically, 12.6% of women aged 18-24 years reported depression before pregnancy, compared to 11.1% of women aged 25-34 years and 11.1% of women aged 35-44 years. White women (15.6% [95% CI: 13.3-18.0]) were significantly more likely to report depression before pregnancy than Hispanic women (10.1% [95%

CI: 8.7-11.5]), and Hispanic women were significantly more likely to report depression before pregnancy than American Indian women (9.8% [95% CI: 6.8-12.7]).

*Physical Abuse during the 12 Months before Pregnancy.* Overall, 4.5% (95% CI: 3.8-5.3) of women reported physical abuse by their husband or partner, ex-husband or ex-partner, another family member or someone else. Physical abuse was defined as being pushed, hit, slapped, kicked, choked or physically hurt in any other way. The percentage of women who reported being physically abused did not vary significantly by age group. Specifically, 6.2% of women aged 18-24 years reported being physically abused compared with 3.9% of women aged 25-34 years, 3.5% of women aged 35-44 years. American Indian women (6.2%, [CI: 3.7-8.7]) were most likely to be physically abused though the difference was not statistically significant. In addition, Hispanic women (5.2%, [CI: 4.1-6.2]) were significantly more likely to be physically abused than White women (2.7%, [CI: 1.6-3.7]).

*Diabetes during the 3 Months before Pregnancy.* Overall, 2.9% (95% CI: 2.3-3.4) of women reported having type 1 or type 2 diabetes during the 3 months before pregnancy. Women aged 35-44 years (5.2%, [95% CI: 3.0-7.3]) were significantly more likely to have pre-pregnancy diabetes than women aged 18-24 years (1.8%, [95% CI: 1.0-2.7]). The prevalence of pre-pregnancy diabetes among women aged 25-34 years was 2.9% (95% CI: 2.1-3.6). The prevalence of pre-pregnancy diabetes did not vary significantly by race/ethnicity. Specifically, the prevalence of pre-pregnancy diabetes among American Indian women was 4.8% followed by 2.8% among White women and 2.6% among Hispanic women.

*Hypertension during the 3 Months before Pregnancy.* Overall, 3.8% (95% CI: 3.2-4.5) of women had hypertension during the 3 months before pregnancy. The percentage of women who had hypertension varied significantly by age group but not by race/ethnicity. Specifically, women aged 35-44 years (6.8% [95% CI: 4.5-9.2]) were significantly more likely to have hypertension than women aged 25-34 years (3.1% [95% CI: 2.3-3.9]). The prevalence of hypertension among women aged 18-24 years was 3.8% (95% CI: 2.6-5.1). In addition, the prevalence of hypertension among American Indian women was 5.1% followed by 4.5% among White women and 3.2% among Hispanic women.

## Discussion

Disparities in preconception health indicators existed among women of the three age and racial/ethnic groups. Compared to older women, women aged 18 to 24 years were significantly more likely to have the following pre-

conception health risk factors: an unintended pregnancy and smoking cigarettes during the 3 months before pregnancy. Women aged 35-44 years were significantly more likely to have pre-pregnancy diabetes and had a greater prevalence of hypertension than women aged 18 to 24 years. Women aged 25-34 years and 35-44 years were significantly more likely to be obese. Regarding protective factors, women aged 18 to 24 years were significantly less likely to take a folic acid supplement.

Compared to the other two racial/ethnic groups, White women were significantly more likely to have the following preconception health risk factors: drinking alcohol and depression during the 3 months before pregnancy. American Indian and Hispanic women were significantly more likely to have the following preconception health risk factors: being overweight and obese. Hispanic women were significantly more likely to be physically abused than White women. Regarding protective factors, American Indian women were significantly more likely to have preconception health insurance. White women were significantly more likely to report taking a folic acid supplement.

Improvements in preconception health among women of reproductive age involve increasing knowledge of healthy behaviors, receiving annual health checkups, improving access to public health programs and having adequate health insurance. Annual health checkups provide the opportunity for health care providers to address chronic health conditions and risk factors for high risk pregnancy and provide health promotion counseling to women of reproductive age. Annual women's health visits offer an opportunity to discuss family planning options with their provider. The Affordable Care Act has expanded the number of women eligible for Medicaid and has increased access to affordable health insurance to women who are ineligible for Medicaid.

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### Prevalence of Preconception Health Behaviors , NM PRAMS 2016-2018

