2016 South Dakota Report Highlights

- 84.2% of South Dakota mothers had health insurance before pregnancy, up from 81.4% in 2014.
- 77.0% of South Dakota mothers did not talk to a health care worker about how to prepare for a healthy pregnancy prior to their most recent pregnancy.
- 38.7% of South Dakota mothers intended to become pregnant.
- 19.1% of South Dakota mothers were not doing anything at the time of the survey to prevent pregnancy.
- 73.4% of South Dakota mothers began prenatal care in the first trimester and 84.1% of mothers attended 80% or more of their prenatal visits.
- 34.2% of South Dakota mothers received WIC services during their most recent pregnancy vs. 36.6% in 2014.
- 4.0% of South Dakota mothers reported having a home visitor during their pregnancy to help prepare for their new baby, and 8.3% had a home visitor after their baby was born.
- 58.5% of South Dakota mothers reported having their teeth cleaned by a dentist or hygienist during the year before pregnancy and 50.6% of mothers had their teeth cleaned during pregnancy.
- 13.3% of South Dakota mothers smoked during the last three months of pregnancy.
- 96.3% of South Dakota mothers did not currently allow smoking anywhere in their home.
- 7.3% of mothers drank during the last three months of pregnancy with less than 1% binge drinking.
- 5.1% of South Dakota mothers reported using marijuana during the three months before pregnancy.
- 53.4% of South Dakota mothers were overweight or obese prior to pregnancy, up from 48.3% in 2014.
- 89.2% of South Dakota mothers breastfed or pumped breast milk for their infant, even for a short period of time.
- 90.8% of South Dakota mothers reported having a postpartum check-up, and 91.6% reported that their baby was seen for a one-week checkup.
- 18.1% of South Dakota mothers were classified as having symptoms of postpartum depression.
- 91.7% of South Dakota mothers placed their infants on their back to sleep.
- 37.2% of South Dakota mothers stated that their infant always sleeps alone in his or her own crib or bed.
- 44.7% of South Dakota mothers reported that their infant sleeps without blankets, toys, cushions, pillows or bumper pads despite recommendations that cribs should be free of these items.
- 71.0% of infants shared a room with their mother as recommended by the AAP.
- 66.0% of South Dakota mothers reported at least one stressful life event, with 26.2% reporting three or more stressors, in the year before pregnancy.
- 3.2% of South Dakota mothers were physically hurt by their husband or partner before pregnancy, and 2.7% were hurt during pregnancy. Domestic abuse was reported more often during pregnancy than after pregnancy.
- About 90% of South Dakota mothers reported having someone to help if they were tired, needed someone to take care of the baby, talk with, or help if they were sick. Family members were the main source of social support.
- 16.0% of South Dakota mothers experienced four or more adverse childhood experiences (ACEs).
Executive Summary

The South Dakota Department of Health, in conjunction with the EA Martin Program at South Dakota State University, conducted a 2016 Pregnancy Risk Assessment Monitoring System (PRAMS)-like surveillance project. The 2016 South Dakota PRAMS-like survey was a statewide population-based survey based on a stratified random sample of women who gave birth to a live-born infant, thereby allowing rates to be estimated for South Dakota mothers giving birth in 2016. The topics included in this survey were selected to enhance our understanding of maternal attitudes and behaviors around the time of pregnancy and the weighted response rate was 67.6%. Key findings by major focus areas include:

Health Insurance

- Percentage of mothers with health insurance before pregnancy increased significantly from 81.4% in 2014 to 84.2% in 2016.
- More than 50% of the mothers had job-based insurance before, during, and after pregnancy; 12.6% received Medicaid before pregnancy, 24.5% during pregnancy and 16.4% after pregnancy; 15.8% were uninsured before pregnancy, 3.7% during pregnancy, and 13.2% after pregnancy; less than 1% of infants were uninsured and 35.5% were on Medicaid.
- Mothers who were uninsured before pregnancy had higher rates of low birthweight infants and preterm births than insured mothers (7.7% vs. 3.9% and 9.9% vs. 5.7%, respectively); mothers who were uninsured during pregnancy had a higher rate of preterm birth than insured mothers (14.5% vs. 6.2%, respectively).

Preconception Care

- 77.0% of South Dakota mothers (78.5% white, 74.0% American Indian, 70.4% other races) did not talk to a health care worker about how to prepare for a healthy pregnancy prior to their most recent pregnancy. This compares to 67.0% in 2014.
- Percent of mothers who did not talk to their health care provider was greater in white mothers, non-Hispanic mothers, mothers with a high school education, unmarried mothers, uninsured mothers, and mothers from households with a middle income.

Pregnancy Intendedness and Birth Control Use

- 38.7% of births were intended, 5.9% were unintended, and 37.7% were mistimed. The remaining mothers (17.7%) were unsure about what they wanted when asked about the timing of their pregnancy.
- 43.5% of mothers were not trying to become pregnant; however, 61.1% were not doing anything to keep from getting pregnant. The most common reason given for not doing anything to prevent pregnancy was that they did not mind if they got pregnant (54.9%).
- Not receiving prenatal care as early as the mother wanted was associated with intendedness of pregnancy: a higher percent of women who had an unintended pregnancy did not receive prenatal care as early as they wanted (22.2%) compared to women who had an intended pregnancy (5.6%).
- At the time of the survey, 19.1% of mothers were not doing anything to prevent pregnancy. Among those not doing anything, the main reason stated was that they did not want to use birth control.

Prenatal Care & Immunizations

- 73.4% of mothers began prenatal care in the first trimester and 94.2% began care in the first or second trimester.
- 84.1% of mothers attended 80% or more of their prenatal visits, and this differed by race (88.5%, 63.4% and 80.4% for white, American Indian and other race mothers, respectively).
- 73.6% of mothers received adequate or more than adequate care, and this differed by race (81.1%, 43.4%, and 60.5% for white, American Indian and other race mothers, respectively).
- 89.0% of mothers were able to begin prenatal care as early as they wanted, but this varied by race (93.0%, 70.4%, and 82.9% for white, American Indian and other race mothers, respectively). Among mothers not receiving care as early as they wanted, not knowing they were pregnant was the main reason followed by not being able to get an appointment when they wanted one.
- 95.2% of mothers reported that they were able to attend all of their recommended prenatal visits, but this varied by race (97.0%, 85.4%, and 95.0% for white, American Indian and other race mothers, respectively). The main barrier to attending prenatal visits was not having transportation to get to the clinic or doctor’s office.
- 92.0% of mothers were offered a flu shot or told to get a flu shot the year before delivery and 92.5% of mothers received a Tdap vaccine in the perinatal period with the majority receiving it during pregnancy.
Women, Infants & Children (WIC) Services
- 34.2% of mothers received WIC services during their most recent pregnancy vs. 36.6% in 2014.
- In general, WIC Mothers received more information from a health care worker during and after pregnancy than non-WIC mothers.

Home Visiting
- 4.0% of mothers reported having a home visitor during their pregnancy to help prepare for their new baby, and 8.3% had a home visitor after their baby was born.

Oral Health During Pregnancy
- 58.5% of mothers reported having their teeth cleaned by a dentist or hygienist during the year before pregnancy (varied by race: 63.9%, 39.3%, and 44.4% for white, American Indian, and other race mothers, respectively).
- 50.6% of mothers had their teeth cleaned by a dentist or hygienist during pregnancy (varied by race: 53.9%, 43.6%, and 34.9% for white, American Indian, and other race mothers, respectively).
- 18.7% of mothers needed to see a dentist for a problem and 14.4% went to a dentist or dental clinic about a problem during pregnancy. Among mothers with a dental problem, 21.3% stated it was hard to go because they could not afford it.

Substance Use Before & During Pregnancy: Tobacco, Alcohol, Illicit Drugs

Use of Spit Tobacco & E-Cigarette/Vaping Products
- 1.0% of mothers used spit tobacco (chewing tobacco and/or snuff) and 5.5% used e-cigarettes or vaping products in the three months before pregnancy. Less than 1% used spit tobacco and 1.3% used e-cigarettes/vaping products during the last three months of pregnancy.

Cigarette Smoking
- 25.5% of mothers smoked in the three months before pregnancy, 13.3% smoked during the last three months of pregnancy, and 16.0% smoked at the time of survey completion. American Indian mothers were more likely to smoke cigarettes before pregnancy than white mothers (54.3% vs. 20.4%), but among those who smoked, American Indian mothers were more likely to quit than white mothers when they found out they were pregnant (51.7% vs. 35.5%, respectively).
- Among mothers who smoked in the three months before pregnancy, the top things that made smoking hard to quit were cravings for a cigarette (83.9%) and loss of a way to handle stress (80.6%).
- 96.3% of South Dakota mothers did not currently allow smoking anywhere in their home (varied by race: 97.9%, 88.5%, and 95.4% of white, American Indian, and other race mothers, respectively).

Alcohol Use
- 64.6% of mothers drank alcohol in the three months before pregnancy with 26.8% binge drinking. 7.3% drank during the last three months of pregnancy with less than 1% binge drinking. Consumption of alcohol before pregnancy was highest among white mothers, non-Hispanic mothers, mothers aged 25 to 34 years, more educated mothers, married mothers and mothers from households with higher income levels.

Illicit Drug Use
- 5.1% of mothers reported using marijuana in the three months before pregnancy. Non-prescription drugs, including oxycodone, hydrocodone and oxycontin, were reported to be used by 1.0% of mothers, and methamphetamines were reported to be used by 0.7% of mothers.

Maternal Health During Pregnancy
- 53.4% of mothers were overweight or obese prior to pregnancy, up from 48.3% in 2014.
- American Indian mothers had 2 to 4 times the prevalence of type 1 or type 2 diabetes and hypertension than white mothers and mothers of other races. A higher percentage of diabetes was seen with older mothers, unmarried mothers and low-income mothers. 12.3% of mothers were diagnosed with gestational diabetes (higher among American Indian mothers and mothers of other races than white mothers: 15.7% and 15.6% vs. 11.3%, respectively).
- 11.5% of mothers reported being diagnosed with depression prior to pregnancy, and a higher percent of non-Hispanic mothers reported depression than Hispanic mothers.

Breastfeeding
- 89.2% of mothers breastfed or pumped breast milk for their infant, even for a short period of time (varied by race: 91.6% for white mothers, 77.5% for American Indian mothers, and 86.9% for mothers of other races).
• 9.2% of mothers had someone suggest to them that they should *not* breastfeed. Parents or in-laws were the most common person suggesting not to breastfeed.

• The main reason for not initiating breastfeeding was not wanting to breastfeed (49.6%), and the main reason for stopping breastfeeding was the mother believed she was not producing enough milk (51.2%).

Postpartum Health

• 90.8% of mothers reported having a postpartum check-up, and 91.6% reported that their baby was seen for a one-week checkup.

• 18.1% of mothers were classified as having symptoms of postpartum depression, and the risk of exhibiting symptoms was higher among unmarried mothers and mothers with low annual household incomes.

Infant Safe Sleep

• 91.7% of infants are placed to sleep on their back (varied by race: 92.0%, 93.6% and 86.2% of white, American Indian, and other race mothers, respectively).

• 37.2% of mothers stated that their infant always sleeps alone in his or her own crib or bed (varied by race: 41.5%, 22.0%, and 24.3% of white, American Indian and other race mothers, respectively).

• Only 44.7% of mothers reported that their infant sleeps without blankets, toys, cushions, pillows or bumper pads despite recommendations that cribs should be free of these items.

• Room-sharing, a recent AAP recommendation, occurs with 71.0% of infants (varied by race; 68.1%, 79.0%, and 83.2% of white, American Indian, and other race mothers, respectively).

• Being talked to by their healthcare provider about what should and should not go in an infant’s crib and placing the crib in the mother’s room were associated with mothers being more likely to do so.

Stress, Domestic Abuse, and Social Supports

Stressful events the year prior to giving birth

• 66.0% of mothers reported at least one stressful life event, with 26.2% reporting three or more stressors, in the year before pregnancy.

• Financial stresses were the most common type of stress (48.3%), followed by emotional stresses (33.6%), partner stresses (23.4%) and traumatic stresses (16.4%).

• Having three or more stressors was associated with the following population characteristics: being American Indian, a young maternal age, less maternal education, being unmarried, having a low household income, and either being uninsured or a Medicaid recipient.

Domestic abuse before, during and after pregnancy

• 3.2% of South Dakota mothers were physically hurt by their husband or partner before pregnancy, and 2.7% were hurt during pregnancy.

• Domestic abuse was reported more often during pregnancy than after pregnancy. The most common abusive event either during, after or both during and after the pregnancy included being controlled by the husband or partner (5.4%).

• 2.8% of mothers reported one abusive event during pregnancy, 3.1% reported 2-3 abusive events, and 0.5% reported four or more abusive events during pregnancy.

Social supports after delivery

• About 90% of the mothers reported having someone to help if they were tired, needed someone to take care of the baby, talk with, or help if they were sick. Family members were the main source of social support.

Adverse Childhood Experiences (ACEs)

• 16.0% of 2016 South Dakota mothers experienced four or more adverse childhood experiences (ACEs). The prevalence of high ACE scores (4+) was higher among American Indian mothers, younger mothers, less educated mothers, unmarried mothers, mothers who were uninsured or on Medicaid, and mothers in households with less income.

• The most frequent ACE was parental divorce or separation with 42.8% of mothers experiencing this as a child, followed by household substance abuse (24.7%). 10-19% of mothers experienced emotional, physical or sexual abuse as a child.

• Mothers with higher ACE scores were more likely to have smoked in the previous two years, used illicit drugs in the three months prior to pregnancy, have lower household income, and have increased prevalence of postpartum depression than mothers with low ACE scores.