



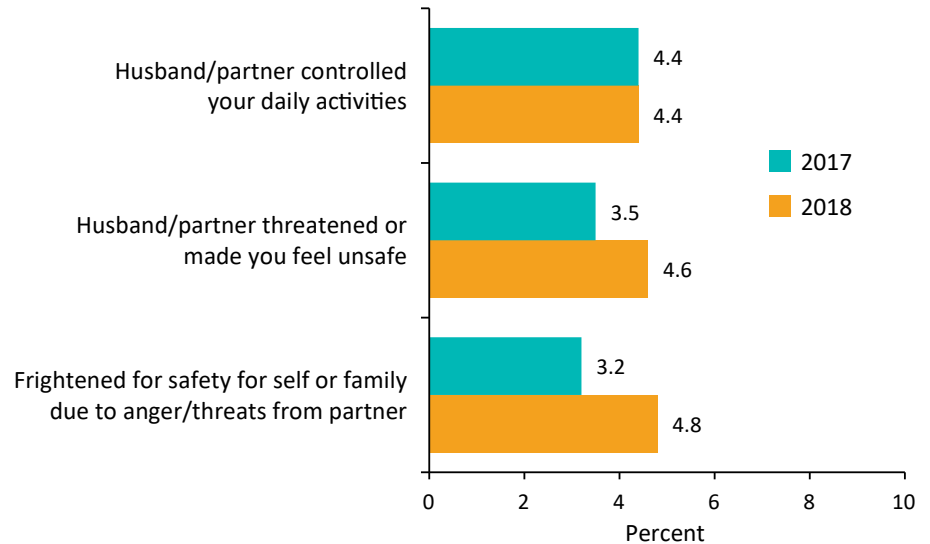
ABUSE BEFORE & DURING PREGNANCY

South Dakota PRAMS, 2018

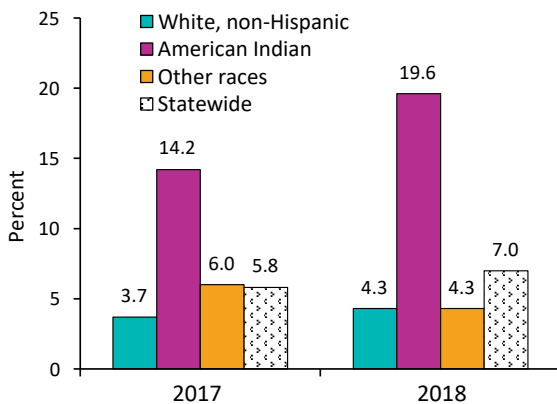
Domestic abuse to women during pregnancy is potentially detrimental to both the pregnant woman and her growing fetus.

Pregnant women who experience domestic abuse may not only have psychological and physical impairments, but also are at an increased risk of adverse birth outcomes. Maternal exposure to abuse increases the risk of low birthweight, preterm birth, and neonatal death and has been shown to be associated with a low breastfeeding rate.

Percent of Mothers Who Experienced Abuse During Pregnancy



Percent of Women Who Experienced Emotional Abuse* During Pregnancy

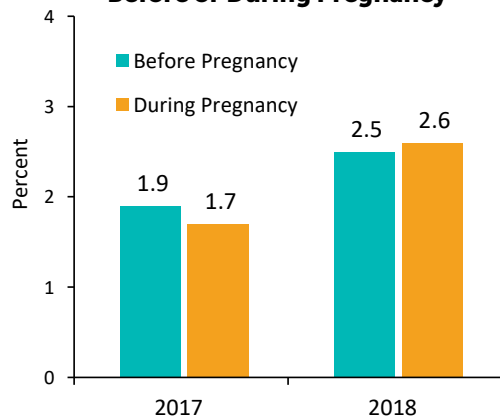


***EMOTIONAL ABUSE** was defined as the husband/partner either trying to control the mother's daily activities, threatening the mother in a way that made her feel unsafe, or frightening the mother for her or her family's safety.

RISK FACTORS AND OUTCOMES ASSOCIATED WITH EMOTIONAL ABUSE INCLUDE:

- ▶ No insurance before pregnancy
- ▶ Smoking 3 months before pregnancy
- ▶ Illicit drug use before pregnancy
- ▶ Attending less than 80% of prenatal care visits
- ▶ Not having their teeth cleaned during pregnancy
- ▶ Having diabetes, hypertension, or depression during pregnancy
- ▶ Having a high adverse childhood experiences (ACE) score

Percent of Women Who Were Physically Abused by Their Husband or Partner Before or During Pregnancy



MOTHERS WHO WERE EMOTIONALLY ABUSED DURING PREGNANCY WERE MORE LIKELY TO BE/HAVE:

- ▶ American Indian
- ▶ Younger
- ▶ Less years of education
- ▶ Not married
- ▶ Lower household income





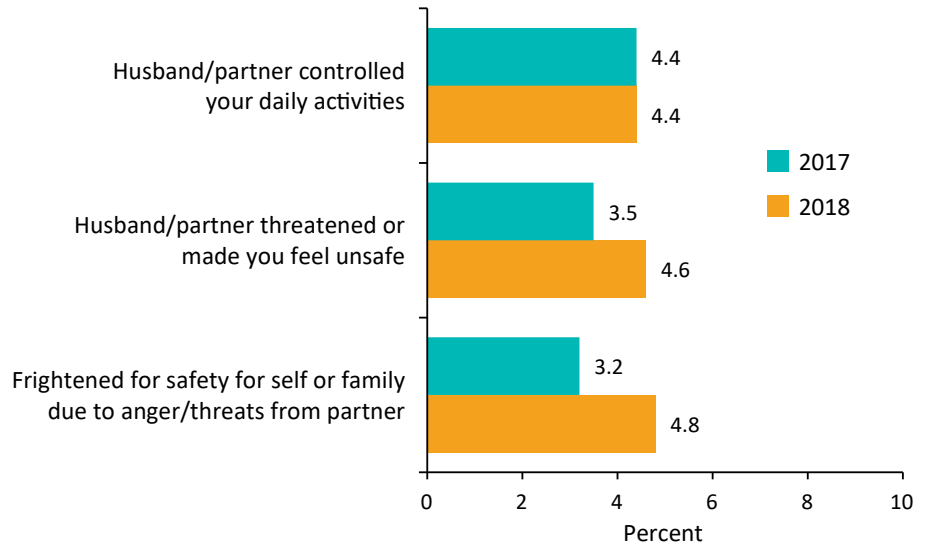
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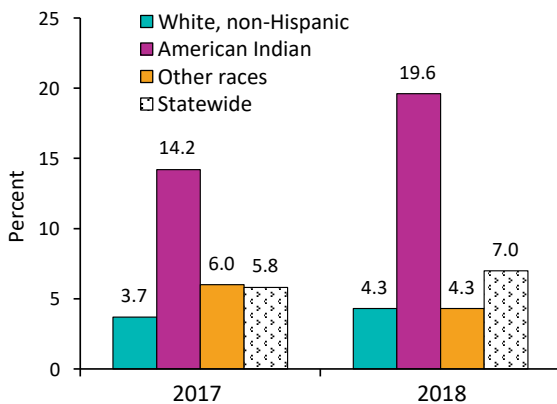
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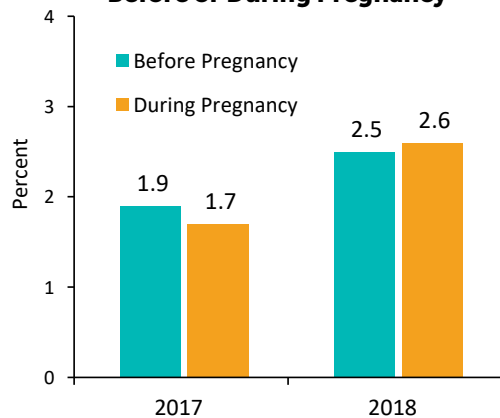


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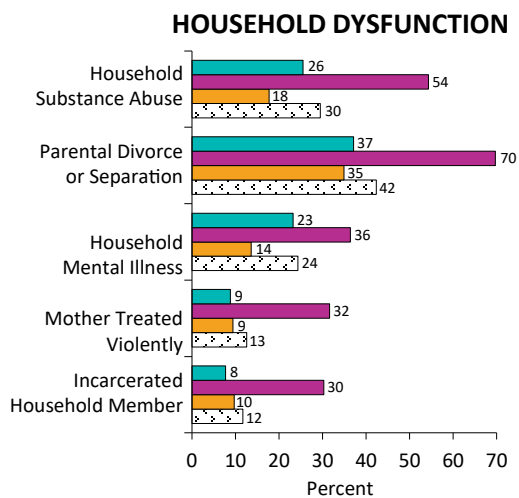
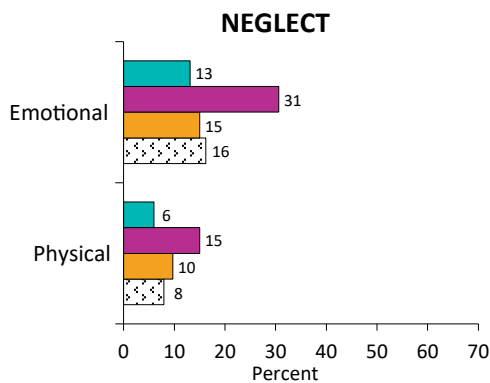
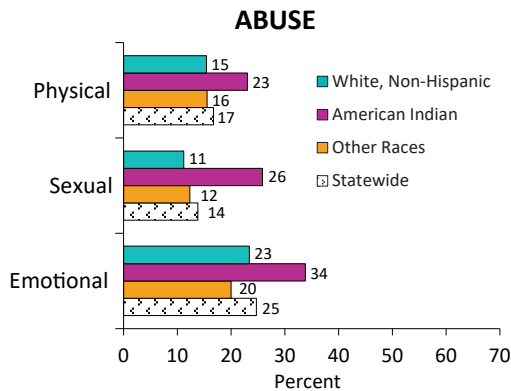


ADVERSE CHILDHOOD EXPERIENCES

South Dakota PRAMS, 2018

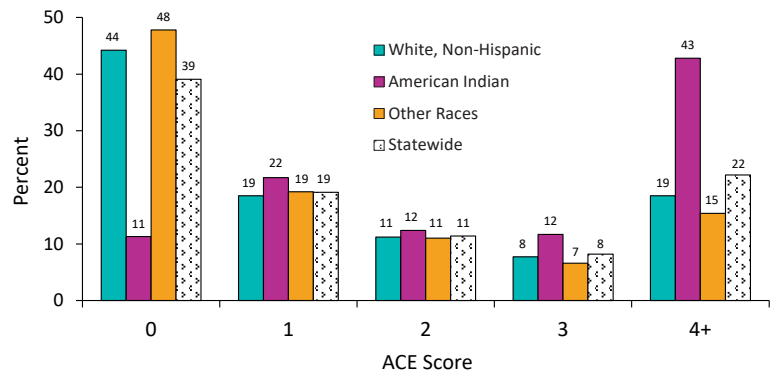
ADVERSE CHILDHOOD EXPERIENCES (ACEs) include different types of abuse, neglect, and household dysfunction. There are numerous reports of relationships between high ACE scores and adult risky health behaviors and chronic diseases. Research is finding effective methods for dealing with trauma resulting from high ACEs.[^]

PERCENTAGES OF SD 2018 PRAMS MOTHERS EXPERIENCING SPECIFIC ACEs BY RACE



PERCENTAGES IN ACE SCORE CATEGORIES BY RACE, 2018

Percent of American Indian mothers with high ACE scores (4+) was higher than percent of white, non-Hispanic mothers and mothers of other races



IN 2018, HIGH ACE SCORES WERE ASSOCIATED WITH:

- ▶ American Indian race
- ▶ Younger maternal age
- ▶ Less years of education
- ▶ Not married
- ▶ Lower household income

RISK FACTORS AND OUTCOMES ASSOCIATED WITH HIGH ACE SCORES INCLUDE:

- ▶ No insurance before pregnancy
- ▶ Smoking or illicit drug use before pregnancy
- ▶ Attending less than 80% of prenatal care visits
- ▶ Teeth not cleaned during pregnancy
- ▶ Emotional abuse during pregnancy
- ▶ Diabetes, hypertension, or depression during pregnancy
- ▶ The infant not sleeping alone in the same room with the mother

[^] See <https://acestoohigh.com/aces-101/>

Data from SD 2018 PRAMS report. See <https://doh.sd.gov/statistics/prams.aspx?>





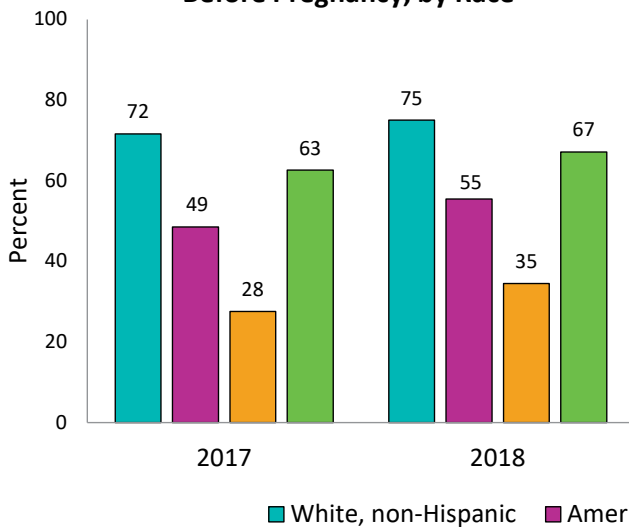
ALCOHOL

South Dakota PRAMS, 2018

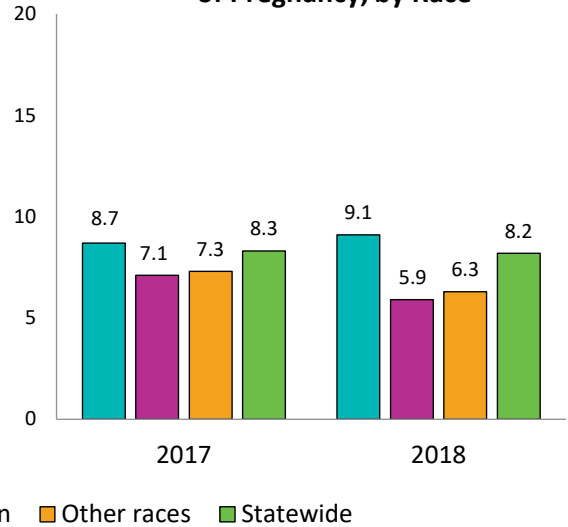
ALCOHOL INTAKE IN WOMEN OF CHILDBEARING AGE

Alcohol consumption during pregnancy can have negative effects including Fetal Alcohol Syndrome (FAS). FAS includes physical abnormalities, behavioral problems, learning disabilities, and below average head size, height, and weight. Since many pregnancies are unintended and often not known until late in the first trimester, it is important to reduce alcohol consumption in women of childbearing age who are at high risk of pregnancy.

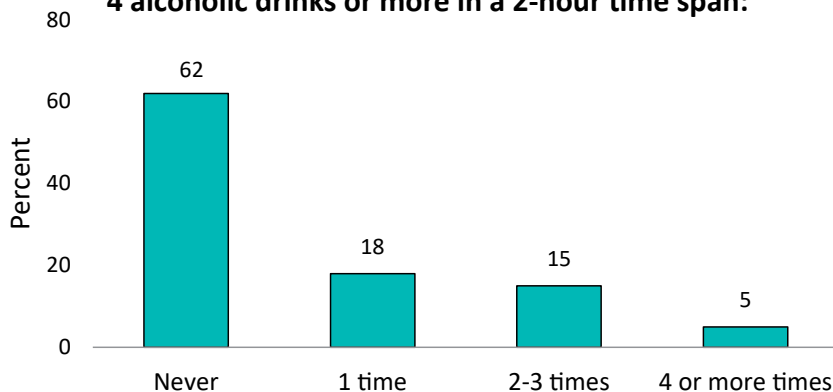
% of Mothers Who Drank 3 Months Before Pregnancy, by Race



% of Mothers Who Drank the Last 3 Months of Pregnancy, by Race



Among women giving birth in 2018 and who drank 3 months before pregnancy, the number of times they drank 4 alcoholic drinks or more in a 2-hour time span:



MOTHERS WHO DRANK 3 MONTHS BEFORE PREGNANCY WERE MORE LIKELY TO BE:

- ▶ White race
- ▶ Non-Hispanic
- ▶ Older
- ▶ More years of education
- ▶ Married
- ▶ Have a higher yearly income



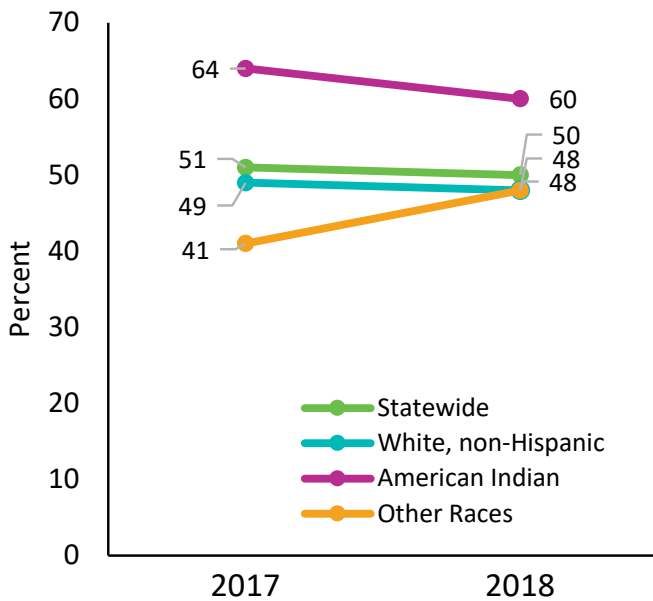


PRE-PREGNANCY BMI

South Dakota PRAMS, 2018

A high pre-pregnancy **Body Mass Index (BMI)** is associated with adverse pregnancy outcomes including increased risk of maternal hypertension, gestational diabetes, and increased rates of cesarean section and macrosomia.

Overweight or Obese Before Pregnancy



OBESITY:

- ▶ In 2015-2016, **41%** of U.S. women over the age of 20 were obese.¹
- ▶ In 2018, **50%** of South Dakota mothers were overweight or obese prior to pregnancy.
- ▶ In 2018, **47%** of South Dakota mothers had a healthy BMI, which is below the Healthy People 2020 target of 58%.

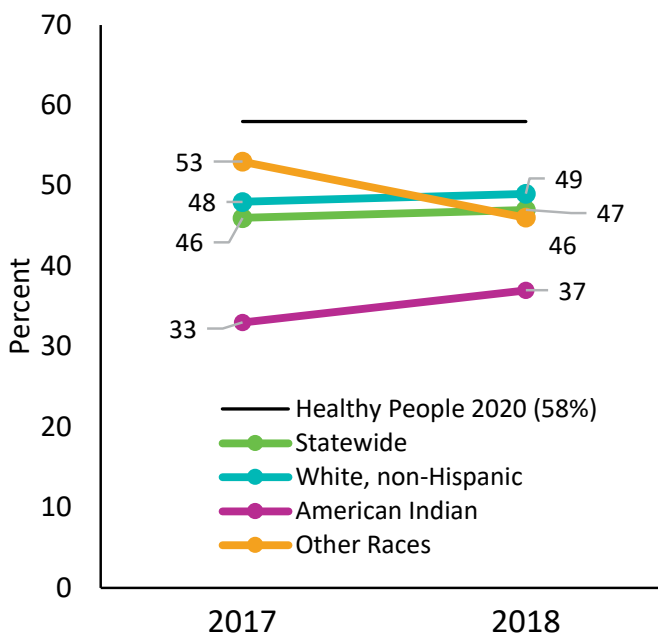
SOUTH DAKOTA MOTHERS WHO HAD A HEALTHY BMI (18.5-24.9 KG/M2) WERE MORE LIKELY TO BE A:

- ▶ White mother or a mother of other races
- ▶ Non-Hispanic
- ▶ Younger mother

MOTHERS WITH A HEALTHY BMI HAD SIGNIFICANTLY LOWER PREVALENCE OF:

- ▶ Diabetes, hypertension or depression during pregnancy (24% vs. 38%)
- ▶ C-section delivery (18% vs. 30%)

Mothers With a Healthy BMI Before Pregnancy



1 Data from Center for Disease Control and Prevention National Center for Health Statistics data brief (see <https://www.cdc.gov/nchs/data/databriefs/db288.pdf>)

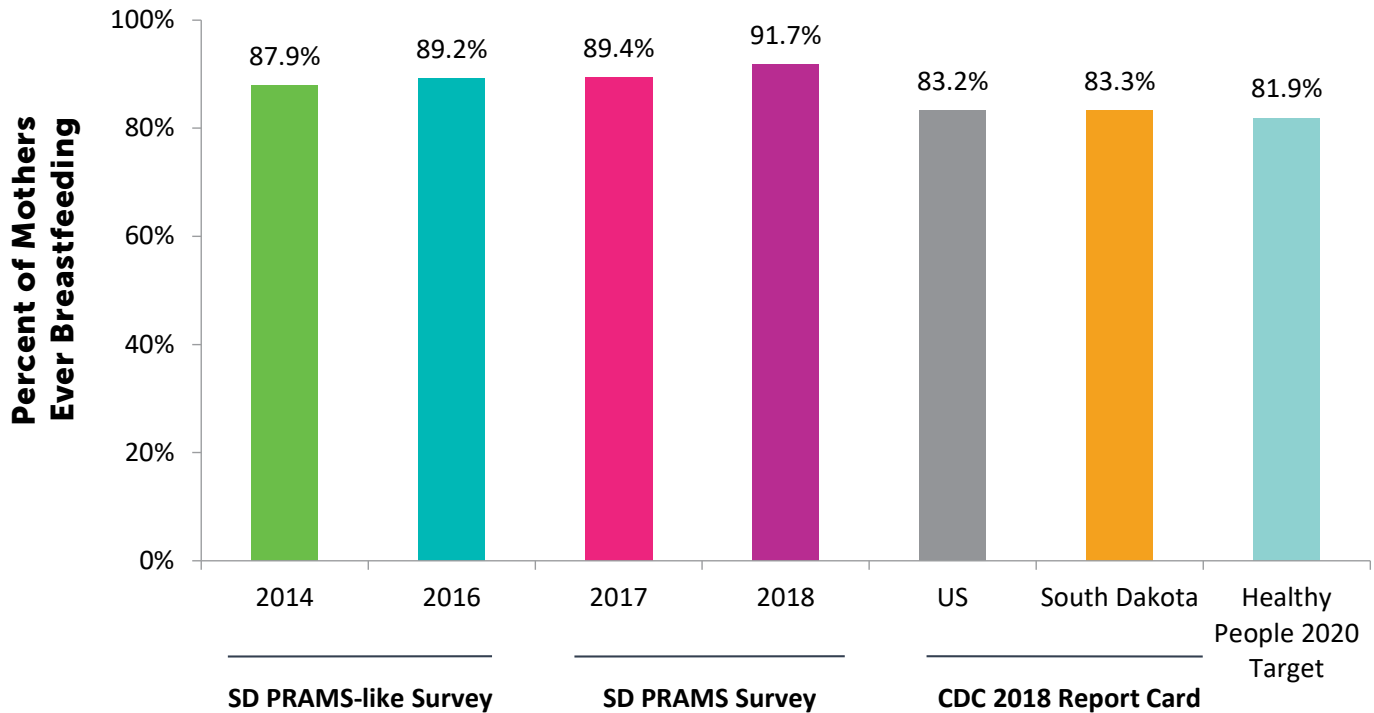
2 Data from SD PRAMS report (see <https://doh.sd.gov/statistics/prams.aspx?>)





BREASTFEEDING

South Dakota PRAMS, 2018



TOP 3 REASONS FOR STOPPING BREASTFEEDING BY RACE:

WHITE, NON-HISPANIC MOTHERS:

1. Thought I was not producing enough milk (56%)
2. Breastmilk alone did not satisfy my baby (35%)
3. My baby had difficulty latching or nursing (31%)

AMERICAN INDIAN MOTHERS:

1. Thought I was not producing enough milk (44%)
2. Went back to work (32%)
3. Nipples were sore, cracked, or bleeding or it was too painful (25%)

MOTHERS OF OTHER RACES:

1. Thought I was not producing enough milk (57%)
2. Breastmilk alone did not satisfy my baby (35%)
3. My baby had difficulty latching or nursing (23%)

WHO IS MORE LIKELY TO EVER BREASTFEED?

- ▶ White, non-Hispanic mothers
- ▶ Mothers with more years of education
- ▶ Married mothers
- ▶ Mothers with greater household incomes

AMONG MOTHERS DELIVERING IN 2018, WHO IS MORE LIKELY TO BE BREASTFEEDING AT 2 MONTHS?

- ▶ White, non-Hispanic mothers
- ▶ Non-Hispanic mothers
- ▶ Older mothers
- ▶ Mothers with more years of education
- ▶ Married mothers
- ▶ Mothers with greater household incomes

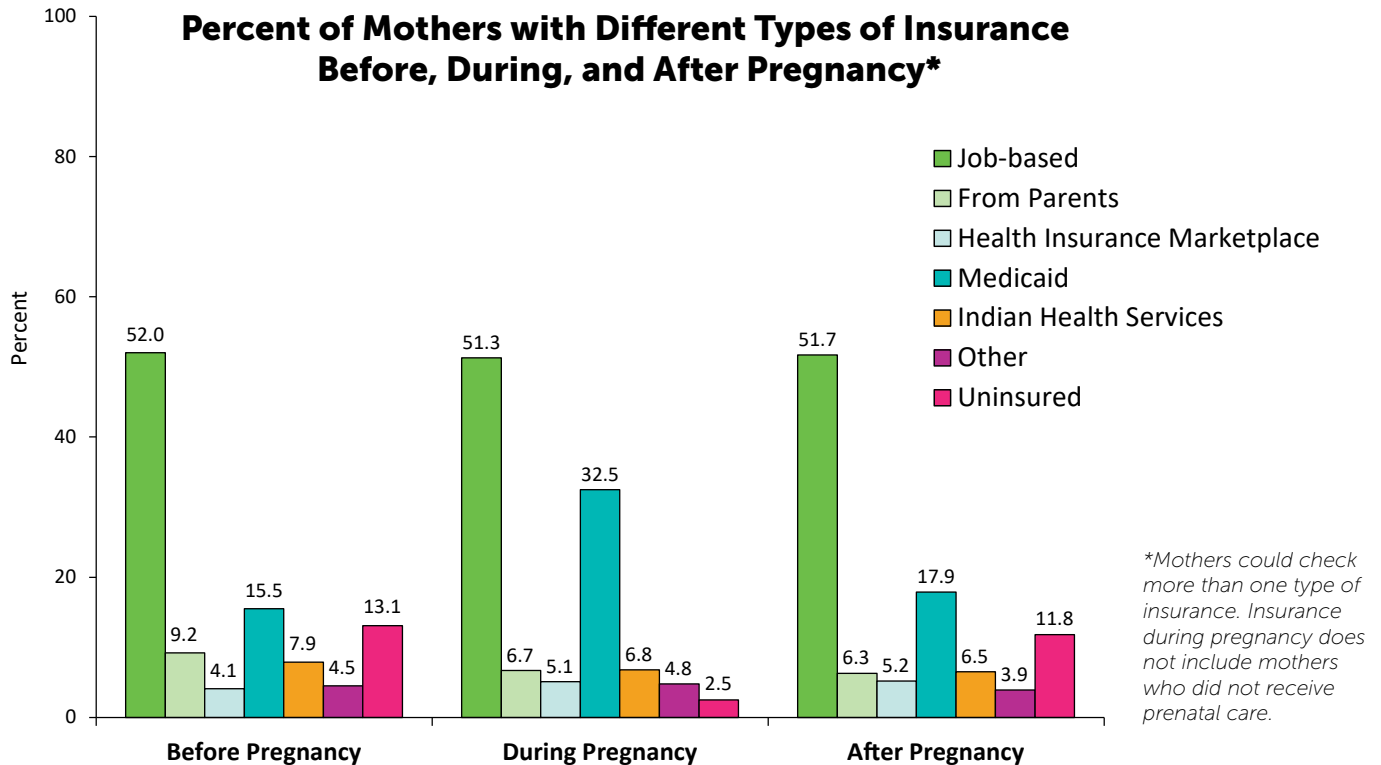




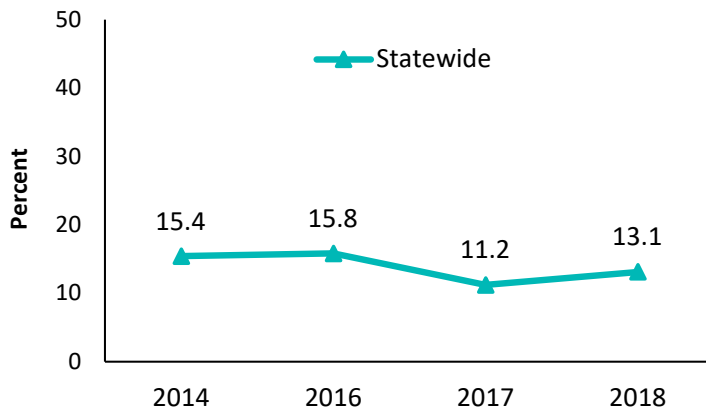
HEALTH INSURANCE

South Dakota PRAMS, 2018

Health insurance coverage is important for accessing health care and staying healthy. Nationally, approximately 11% of women aged 19-64 years were not insured for health care in 2017.¹ Lack of health care coverage for pregnant women is associated with inadequate prenatal care, which can lead to poor outcomes. It has been estimated that every dollar spent on prenatal care can save approximately \$3.33 in postnatal care costs and \$4.63 in long-term costs.²



Uninsured South Dakota Mothers the Month Before Pregnancy, by Year



PERCENT OF UNINSURED MOTHERS IN 2018 BY RACE...BEFORE PREGNANCY:

- ▶ 10% White, non-Hispanic mothers
- ▶ 16% American Indian mothers
- ▶ 27% mothers of other races

BEING UNINSURED BEFORE PREGNANCY WAS ASSOCIATED WITH BEING:

- ▶ A mother of other races or an American Indian mother
- ▶ Hispanic
- ▶ Less years of education
- ▶ Not married
- ▶ Lower household income

1 <https://www.kff.org/womens-health-policy/fact-sheet/womens-health-insurance-coverage-fact-sheet/>

2. American Journal of Obstetrics and Gynecology 182:233, 2000.

Data from SD 2018 PRAMS report. See <https://doh.sd.gov/statistics/prams.aspx>





MATERNAL ORAL HEALTH

South Dakota PRAMS, 2018

ORAL HEALTH should be considered an important part of prenatal care because poor oral health during pregnancy can lead to poor birth outcomes. Maternal oral health status is also a strong predictor of offspring oral health status.*

TOP 3 BARRIERS TO DENTAL CARE DURING PREGNANCY

WHITE

1. Could not afford to go to the dentist (20%)
2. Did not think it was safe to go to the dentist during pregnancy (7%)
3. Could not find a dentist that would take Medicaid patients (4%)

AMERICAN INDIAN

1. Did not think it was safe to go to the dentist during pregnancy (23%)
2. Could not afford to go to the dentist (18%)
3. Could not find a dentist that would take Medicaid patients (15%)

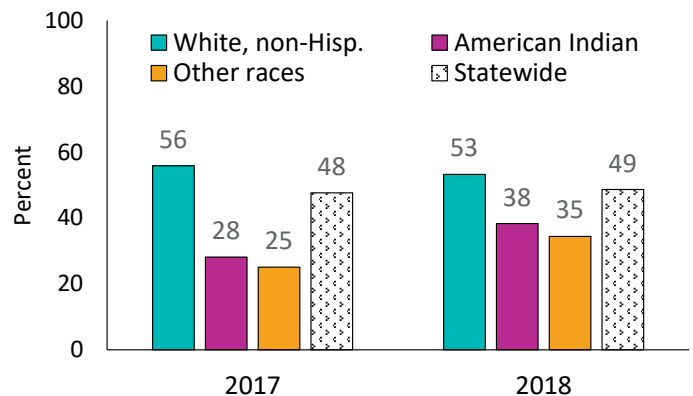
OTHER RACES

1. Could not afford to go to the dentist (21%)
2. Did not think it was safe to go to the dentist during pregnancy (16%)
3. Could not find a dentist that would take Medicaid patients (7%)

CHARACTERISTICS ASSOCIATED WITH MOTHERS WHO HAD THEIR TEETH CLEANED DURING THEIR PREGNANCY WERE:

- ▶ White
- ▶ Non-Hispanic
- ▶ Older
- ▶ More years of education
- ▶ Married
- ▶ Higher household income

Mothers who had their teeth cleaned during their most recent pregnancy by race and year



RISK FACTORS OR BEHAVIORS ASSOCIATED WITH MOTHERS WHO DID NOT HAVE THEIR TEETH CLEANED DURING PREGNANCY WERE:

- ▶ Being uninsured
- ▶ Smoking 3 months before pregnancy
- ▶ Illicit drug use 3 months before pregnancy
- ▶ Delayed or no prenatal care
- ▶ Attended less than 80% of prenatal care visits
- ▶ Emotional abuse during pregnancy
- ▶ Low birth weight
- ▶ Never breast fed
- ▶ Baby being exposed to smoke
- ▶ Having an ACE Score of 4 or more



*CDC Pregnancy and Oral Health: <https://www.cdc.gov/oralhealth/publications/features/pregnancy-and-oral-health.html>;
more information on the SD 2018 PRAMS visit: <https://doh.sd.gov/statistics/prams.aspx?>

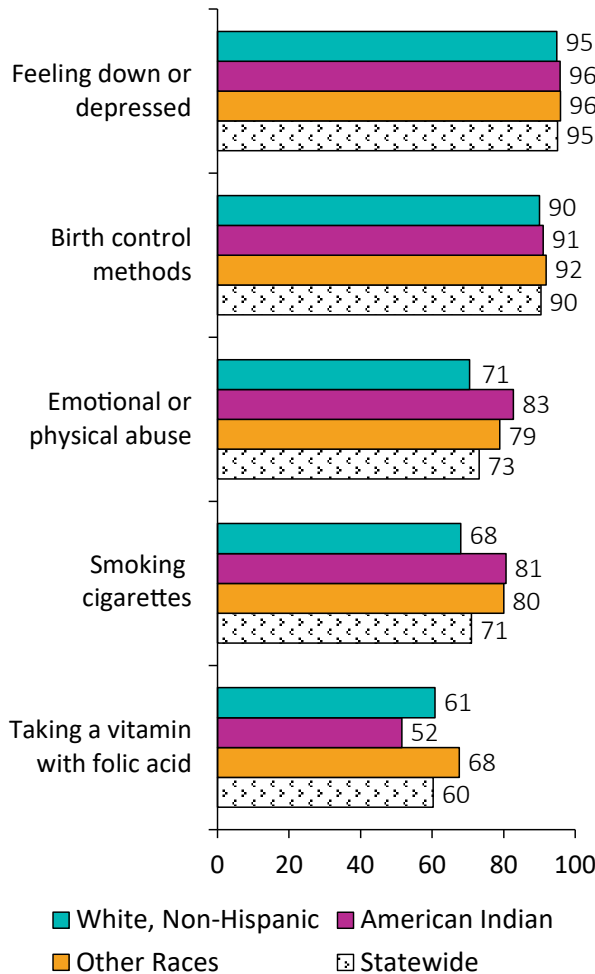


POSTPARTUM CARE

South Dakota PRAMS, 2018

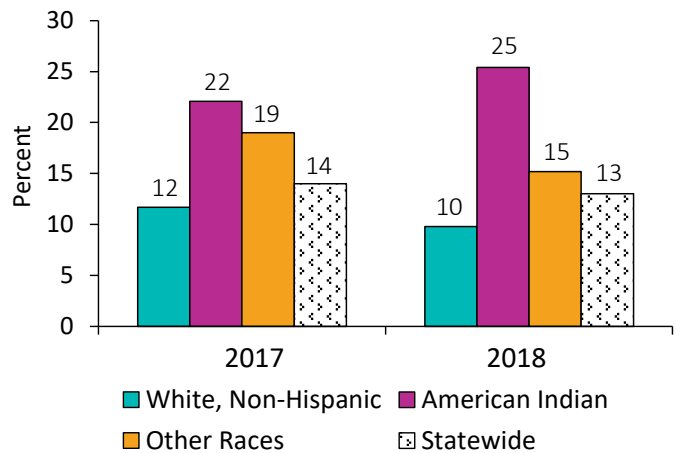
89% of South Dakota mothers giving birth in 2018 had a postpartum checkup. This differed by race: **94%** for white, non-Hispanic mothers, **71%** for American Indian mothers, and **89%** of mothers of other races.

Top Five Topics Covered at Postpartum Visit



58% or fewer of the South Dakota mothers reported the following topics were covered at a postpartum visit: healthy eating, exercise, and losing weight gained during pregnancy (58%); how long to wait before getting pregnant again (48%); gave or prescribed a contraceptive method such as the pill, patch, shot, NuvaRing, or condoms (41%); inserted an IUD or a contraceptive arm implant (23%); and were tested for diabetes (17%).

Postpartum Depressive Symptoms



POSTPARTUM DEPRESSIVE SYMPTOMS WERE MORE COMMON AMONG:

- ▶ American Indian mothers
- ▶ Younger mothers
- ▶ Mothers with less years of education
- ▶ Unmarried mothers
- ▶ Lower household income

POSTPARTUM DEPRESSIVE SYMPTOMS WERE ASSOCIATED WITH HIGHER PREVALENCE OF:

- ▶ Adverse childhood experiences (ACE) score
- ▶ Diabetes, hypertension or depression during pregnancy
- ▶ Emotional abuse during pregnancy
- ▶ Teeth not cleaned during pregnancy
- ▶ Smoking and illicit drug use before pregnancy



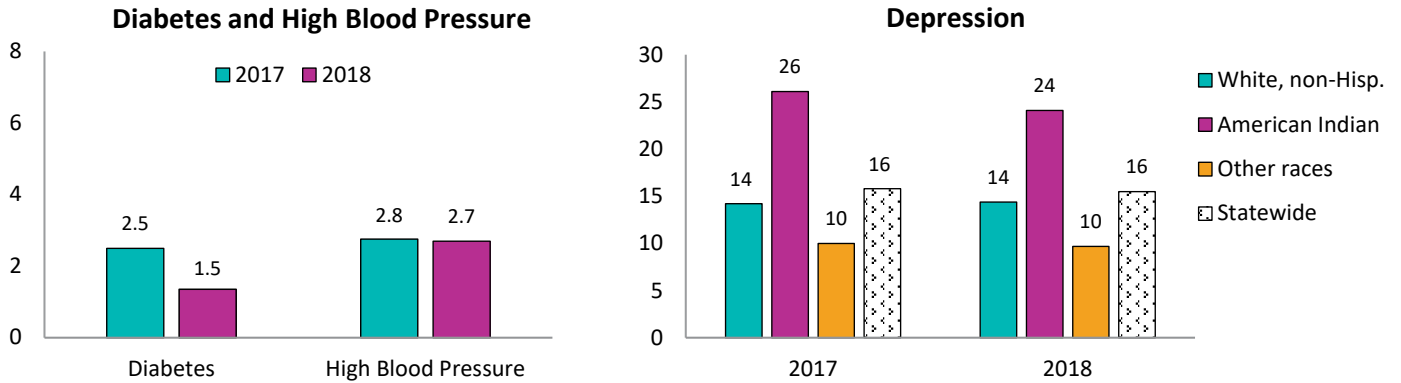


PRECONCEPTION CARE

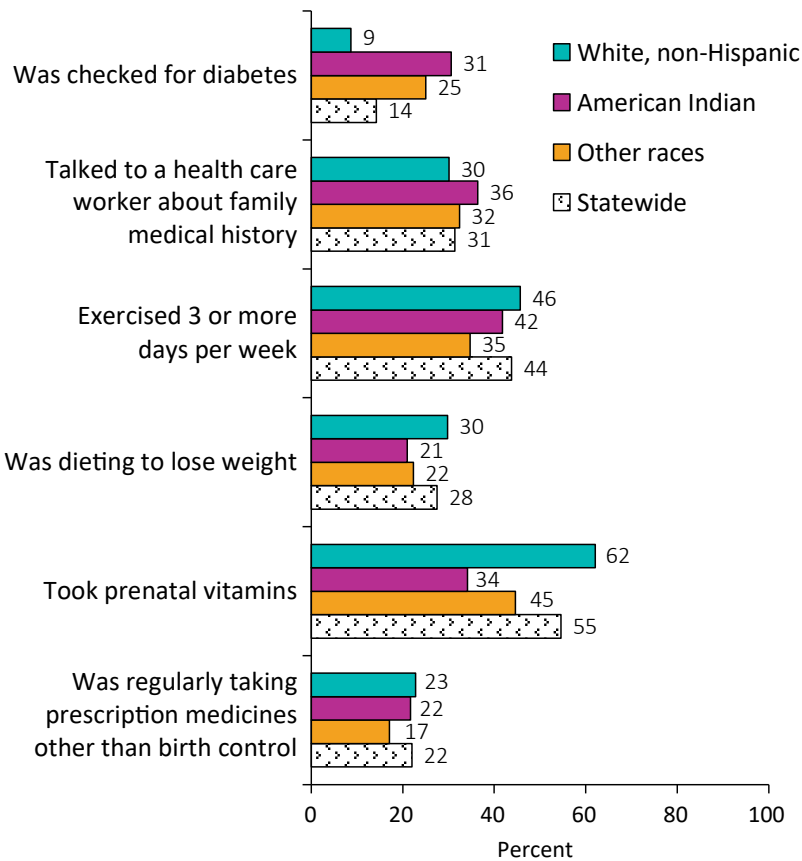
South Dakota PRAMS, 2018

The goal of **PRECONCEPTION CARE** is to reduce the risk of adverse health effects and poor pregnancy outcomes for mothers & their infants.

Percent of Women with Health Conditions During the 3 Months Before Pregnancy



Health Behaviors Before Pregnancy



69% OF MOTHERS HAD A HEALTH CARE VISIT IN THE 12 MONTHS BEFORE PREGNANCY. THEY WERE MORE LIKELY TO BE:

- ▶ White
- ▶ Non-Hispanic
- ▶ More years of education
- ▶ Older
- ▶ Married
- ▶ Higher household income

TOP 3 TOPICS COVERED IN HEALTH CARE VISITS 12 MONTHS BEFORE PREGNANCY:

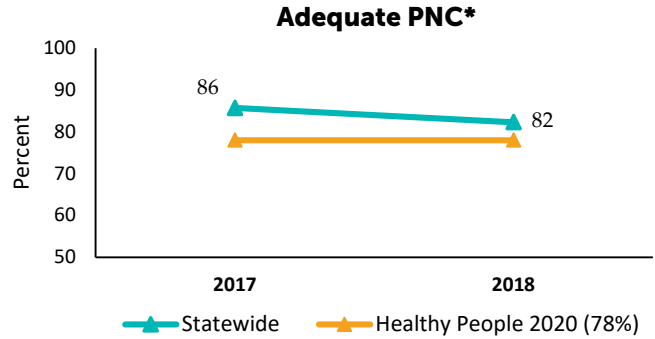
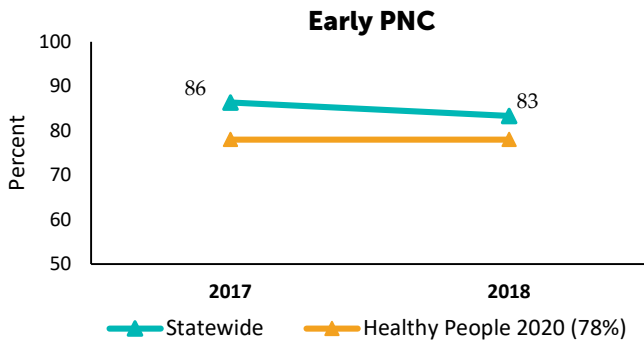
- ▶ Asked if the mother was smoking (82%)
- ▶ Asked if the mother was feeling down or depressed (68%)
- ▶ Asked if mother was being emotionally or physically abused (68%)



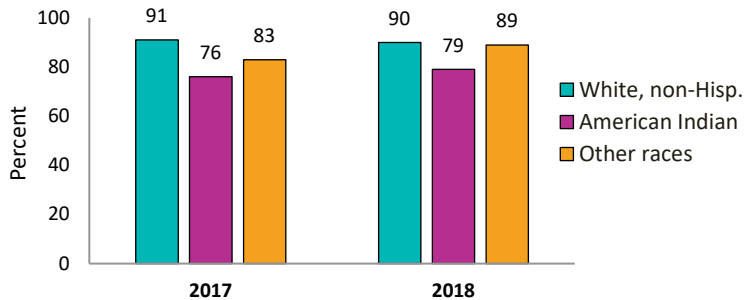


PRENATAL CARE

South Dakota PRAMS, 2018



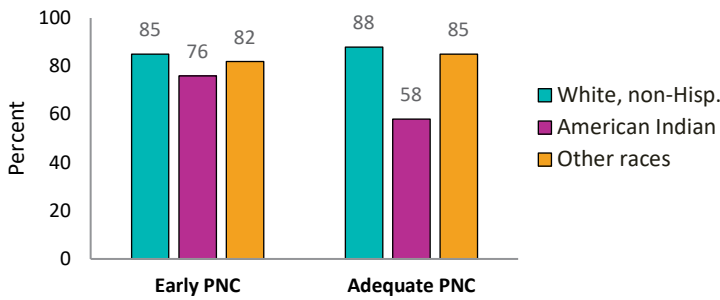
Mother Received Prenatal Care as Early as Wanted:



GET MOTHERS IN FOR PRENATAL CARE EARLY & OFTEN

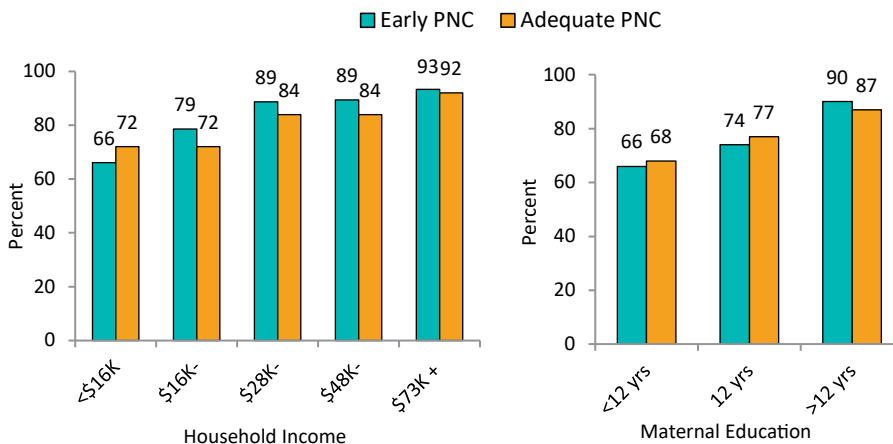
Early and adequate prenatal care (PNC) is important to improve pregnancy and birth outcomes.*

Early and Adequate PNC* is Influenced by Race, Income & Education:



TOP 3 REASONS SOUTH DAKOTA MOTHERS COULD NOT GET PRENATAL CARE AS EARLY AS THEY WANTED IT^

- ▶ Did not know she was pregnant (44%)
- ▶ Could not get an appointment when wanted (36%)
- ▶ Doctor or health plan would not start care as early as wanted (24%)



*Early PNC defined as care beginning in 1st trimester; adequate care defined as attending 80% of more of scheduled PNC visits based on when prenatal care began.

^Data from SD 2018 PRAMS report (see <https://doh.sd.gov/statistics/prams.aspx>).

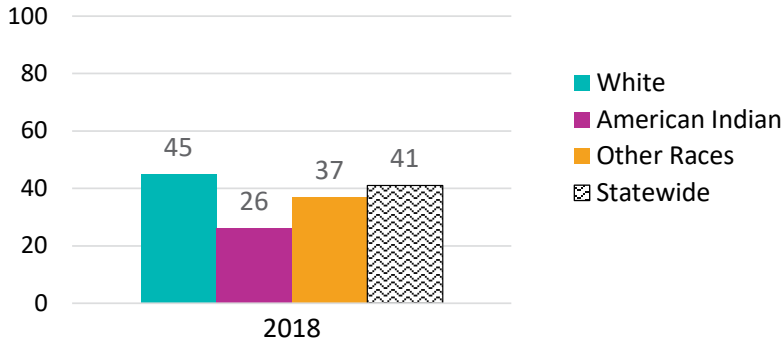


SAFE SLEEP

South Dakota PRAMS, 2018

The Sudden Unexplained Infant Death (SUID) rate, which includes SIDS, unknown causes, and accidental suffocation and strangulation in bed has declined substantially since 1990, following the implementation of the American Academy of Pediatrics safe sleep recommendations in 1992, the Back to Sleep program in 1994, and the release of the SUID Investigation Reporting Form in 1996. In 2016, the U.S. SUID death rate was 91 per 100,000 live births, while South Dakota had a rate of 122 per 100,000 live births and was ranked #34 out of 46 states (rank #1 representing the lowest SUID rate).¹

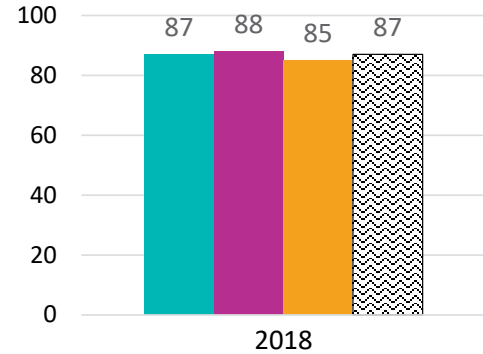
Percent of mothers whose infant slept on an approved sleep surface



Mothers who laid their infant to sleep on an approved sleep surface were more likely to:

- ▶ Be white or of other races
- ▶ Be married
- ▶ Earn a higher household income

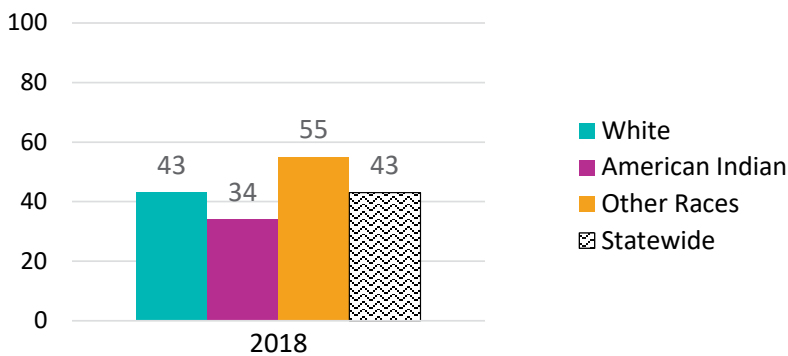
Percent of mothers who laid their infant to sleep on their back



Mothers who laid their infant to sleep on their back were more likely to:

- ▶ Have more years of education
- ▶ Earn a higher income

Percent of mothers whose infant slept alone in the mother's room

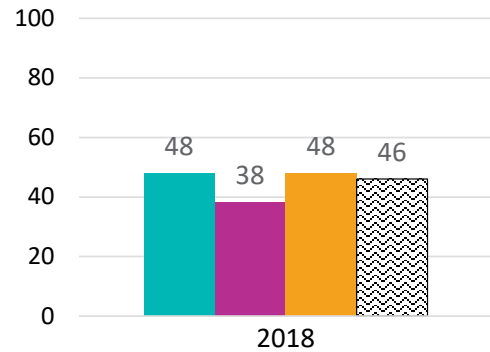


Mothers whose infant slept alone in the mother's room were more likely to:

- ▶ Be of other races or white
- ▶ Be Hispanic
- ▶ Have less years of education
- ▶ Earn a lower household income

There were no significant changes in these percentages between 2017 and 2018.

Percent of mothers whose infant slept without soft objects or loose bedding



Mothers whose infant slept without soft objects or loose bedding were more likely to:

- ▶ Be of other races or white
- ▶ Be older up to 35 years old
- ▶ Have more years of education
- ▶ Be married
- ▶ Earn a higher household income

¹ Federally Available Data (FAD) Resource Document, Release Version 4/1/2019. Health Resources and Services Administration, MIECHV Program, <https://mchb.tvisdata.hrsa.gov/uploadedfiles/TvisWebReports/Documents/FADResourceDocument.pdf>
Data from the South Dakota 2018 PRAMS: <https://doh.sd.gov/statistics/prams.aspx>





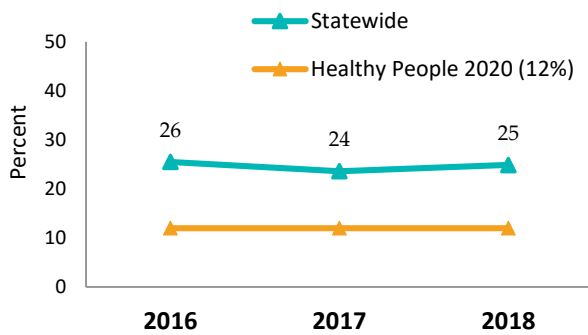
SMOKING DURING PREGNANCY

South Dakota PRAMS, 2018

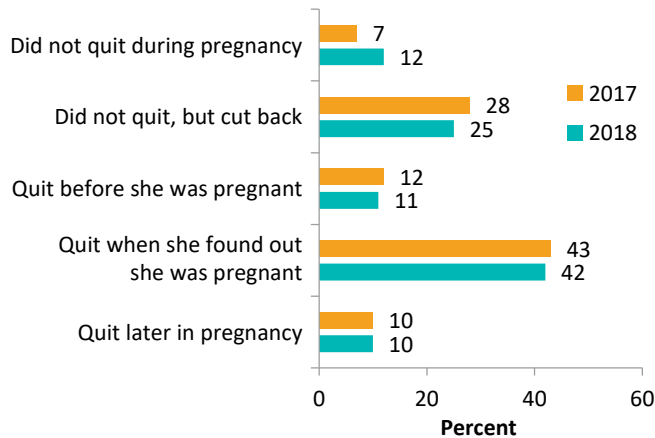
28% of South Dakota mothers smoked the two years before pregnancy and **10%** smoked the last three months of pregnancy.

97% of South Dakota mothers reported that their baby was not around anyone who was smoking.

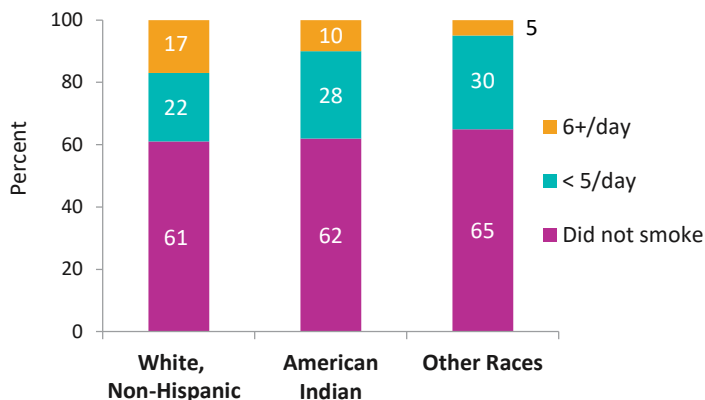
Mothers who smoked the 3 months before pregnancy



Quit status among women who smoked the 3 months before getting pregnant



Number of cigarettes smoked the last 3 months of pregnancy among women who smoked in the last 2 years



WOMEN WHO WERE MORE LIKELY TO SMOKE DURING THE 3 MONTHS BEFORE PREGNANCY WERE:

- ▶ American Indian mothers
- ▶ Younger mothers
- ▶ Mothers with less years of education
- ▶ Unmarried mothers
- ▶ Mothers who had less household income

WOMEN WHO SMOKED THE LAST 3 MONTHS OF PREGNANCY WERE MORE LIKELY, COMPARED TO THOSE WHO DID NOT SMOKE, TO:

- ▶ Not be insured before pregnancy
- ▶ Use illicit drugs before pregnancy
- ▶ Attend less than 80% of prenatal care visits
- ▶ Not have their teeth cleaned during pregnancy
- ▶ Be emotionally abused by their husband or partner
- ▶ Have diabetes, hypertension or depression during pregnancy
- ▶ Never breastfeed
- ▶ High higher adverse childhood experiences

