Report on New Mexico Navajo Mothers and Their Infants

2012 - 2018

Pregnancy Risk Assessment Monitoring System Data







Foreword

The epidemiological report, entitled "Report on New Mexico Navajo Mothers and Their Infants 2012-2018" presents the analysis of the data received from 2012-2018, and updates the 2005-2011 report. The 2012-2018 report is one of many other published reports to come from the Navajo Epidemiology Center (NEC) and Navajo Pregnancy Risk Assessment Monitoring System (PRAMS) Workgroup. The report focuses on Navajo mothers living in New Mexico and intends to inform public health decision makers and health care providers about the health of Navajo mothers and infants.

Reports such as these are routinely published by the state health departments and public health agencies. They are invaluable tools for making key public health decisions and taking action based on epidemiological data. Mothers and their infants constitute an important population and surveys such as the New Mexico PRAMS survey helps broaden our understanding of the successes and identify areas we can improve maternal and child health services.

The NEC has catalogued maternal and child health reports from other public health agencies that contains public health data relevant to Navajo mothers and infants. This report focusing on New Mexico, is a partial fulfillment of the goal to publish risk assessment reports for all Navajo mothers and infants in the three states bordering the Navajo Nation: Arizona, New Mexico and Utah.

Acknowledgments

The report is the result of a continuing collaboration between the Navajo Epidemiology Center, New Mexico PRAMS/ Maternal and Child Health Epidemiology Program, Navajo Department of Health, Navajo Women, Infants and Children Program, Navajo Area Indian Health Service, Albuquerque Area Southwest Tribal Epidemiology Center, Utah PRAMS Program, Arizona PRAMS Program, and Centers for Disease Control and Prevention. Representatives from these organizations make up the Navajo PRAMS Workgroup and are recognized and commended for their contribution to this report:

Special Thanks

We acknowledge and thank the New Mexico PRAMS/Maternal and Child Health Epidemiology program staff for their willingness to share data on Navajo mothers and infants. We also thank the mothers who participated in New Mexico PRAMS. Without their support and assistance, this and many other reports could not be published.

Bauer, Mark - Diné College Begay, Amber-Rose - Diné College Biakeddy, Jayme - Navajo Epidemiology Center Braun, Jean - New Mexico PRAMS Program Celaya, Martin - Arizona Department of Health Services Coronado, Eirian - New Mexico PRAMS Program Dickerson, Christopher - Diné College Enos, Samantha - University of Arizona Gonzales, Lupita - Arizona Department of Health Services Howe, Jean - Northern Navajo Medical Center Hu, Diana - Tuba City Regional Health Care Corporation Kleiner, Antoinette - Northern Navajo Medical Center Krishna, Nidhi - Arizona Department of Health Services Louis, Hondo - Media Consultant; Wayfinder Louis, Note - Media Consultant; Wayfinder Luna, Natali - Arizona Department of Health Services Martinez, Desirae - New Mexico Department of Health Murphy, Holly - Utah Department of Health Ogram, Erin - Arizona Department of Health Services Pinto, Lynsey - New Mexico PRAMS Program Sisneros, Dorin - New Mexico PRAMS Program Yazzie, Del - Navajo Epidemiology Center



Jayme Biakeddy, Epidemiologist, Navajo Epidemiology Center



Del Yazzie, Director, Navajo Epidemiology Center



Eirian Coronado, Principal Investigator/Director, New Mexico PRAMS



Samantha Enos, Graduate Student Intern, University of Arizona



Nidhi Krishna, Epidemiologist, Arizona PRAMS



Lynsey Pinto, New Mexico PRAMS, Coordinator



Erin Ogram, Epidemiologist, Arizona Department of Health Services



Amber-Rose Begay, Navajo Maternal and Child Health Program Coordinator, Diné College

Executive Summary

The report highlights stages of pregnancy in three sections: preconception, prenatal and postpartum. The areas identified of most concern are presented below.

Preconception

Three preconception health factors needing improvement were identified.

- Pregnancy planning and contraception 56% of Navajo mothers who said they were not trying to get pregnant were not using contraception**. 30% of Navajo mothers did not intend to become pregnant, and 8% did not want to become pregnant.
- ** The question about mothers trying or not trying to get pregnant and whether or not they were using contraception when they became pregnant was not asked in the PRAMS Phase 8 Survey so responses for 2016-2018 are not available for these years.
- Multivitamins to prevent birth defects 60% of Navajo mothers did not take a multivitamin or prenatal vitamin before pregnancy, and only 27% took a daily multivitamin.
- Weight 66% of Navajo mothers' BMI (body mass index) was above the healthy range. A BMI below 18.5 is considered underweight; 18.5 to 24.9 is considered healthy; 25 to 29.9 is considered overweight; 30 or higher is considered obese.

Prenatal

Pregnant women who have never had diabetes before but who have high blood glucose (sugar) levels during pregnancy are said to have gestational diabetes.

• Diabetes: 5% of Navajo mothers reported having pre-existing diabetes, and 16% developed diabetes during pregnancy (gestational diabetes).

Postpartum

Postpartum depression was common among Navajo mothers.

• Symptoms of depression after delivery were reported by 15% of Navajo mothers.

Changes Over Time

In comparison to the previously published Navajo PRAMS Report 2005-2011, there were some statistically significant changes between 2005-2011 and 2012-2018 in the percentage of women reporting certain health behaviors and services.

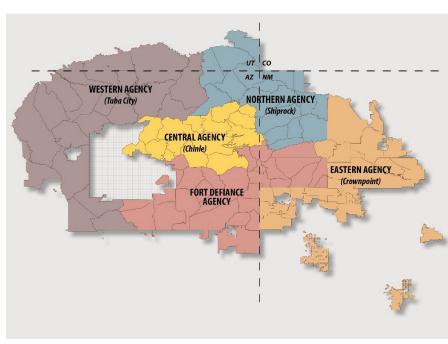
- The percentage of Navajo mothers receiving home visiting services fell over time for visits during pregnancy and for visits after delivery. Home visits during pregnancy decreased from 14% in 2005-2011 to 12% in 2012-2018 among Navajo mothers, respectively. Similarly, home visits after delivery decreased from 34% of mothers in 2005-2011 to 23% in 2012-2018, respectively.
- Oral health services during pregnancy also increased between the two report periods. In 2005-2011, 37% of women went to a dentist or dental clinic during pregnancy for teeth cleaning increasing to 42% in 2012-2018. The percentage of Navajo mothers who had their health care provider discuss how to care for teeth and gums during pregnancy also increased significantly from 53% in 2005-2011 to 59% in 2012-2018***.
- ***The question about providers discussing the care of teeth and gums during pregnancy was not asked in the PRAMS Phase 8 Survey so responses for 2016-2018 are not available for these years.
- There was an increase in Medicaid coverage among Navajo mothers. Medicaid coverage for prenatal care increased from 70% in 2005-2011 to 87% in 2012-2018.
- Navajo mothers were consistent in placing their infants in a safe sleep position between 2005-2011 to 2012-2018. The percentage of Navajo mothers placing their infants on their back to sleep remained at 85%.
- Maternal stress slightly dropped over time in two domains (partner-related stress and traumatic stress). Although not included in the most recent report, partner-related stress during pregnancy decreased from 37% of women in 2005-2011 to 35%, and traumatic stress decreased from 34% to 30%.

Navajo Epidemiology Center

The Navajo Epidemiology Center (NEC) was established in 2005 with the intention of identifying high priority Navajo health status objectives, developing disease surveillance systems, and implementing disease control and prevention programs across the Navajo Nation. NEC is a program within the Navajo Department of Health, which serves one of the largest Native American tribes in the United States. The Navajo Nation has a population of approximately 155,000 Navajos living within the Navajo Nation boundaries (see map below of Navajo Nation 'agencies'), plus approximately another 175,000 living in border towns and metropolitan areas. It serves an area of 27,000 square miles in the Southwest United States. Portions of Arizona, New Mexico, and Utah extend into the Navajo Nation, necessitating working relationships with the "three-states" on a number of fronts, including public health.



The Navajo Department of Health administers health programs include:



Office of the Executive Director Navajo Epidemiology Center Division of Behavioral & Mental Health Services Environmental Health & Protection Program Division of Aging & Long-Term Care Support Public Health Emergency Preparedness Program Navajo Research Program Diabetes Prevention Program Community Health Representative Program Uranium Workers Program Food Distribution Program **Cancer Prevention Program** Health Education & HIV Prevention Program Women, Infants and Children Program Kayenta Public Health Nursing Information Technology Infectious Disease Prevention & Control Program Non-Emergency Medical Transport Program

What is PRAMS?

PRAMS is a multi-year, population-based surveillance system developed and sponsored by the Centers for Disease Control and Prevention (CDC) in 46 U.S. states (includes Arizona, New Mexico and Utah) representing approximately 81% of all U.S. live births. The New Mexico PRAMS program monitors the health status, behaviors and experiences of New Mexico mothers before, during and after the birth of a child. Developed and first administered in 1997, New Mexico PRAMS program uses a state-wide survey instrument to query mothers on a variety of pregnancy risk factors, including prenatal care, counseling, multivitamin use, intimate partner abuse, teen pregnancy, home visiting, unintended and unwanted pregnancies, and other factors associated with pregnancy and birth outcomes.



PRAMS Methodology

The report presents the results of the New Mexico PRAMS data analysis for Navajo mothers and infants residing in New Mexico. Mothers who self-identified themselves as Navajo on their infants' birth certificates were considered eligible to be included in the report. While Arizona and Utah fulfill many maternal and child health functions, this report does not include data for Navajo mothers residing in Arizona and Utah. The need to overcome this significant limitation is currently being addressed.

Population and Sample

The eligible New Mexico PRAMS population included all New Mexico resident mothers giving birth in New Mexico. Women who delivered out-of-state or gave their infants for adoption were not eligible for this survey. Information was collected on only one infant from each multiple birth. Because of these exclusions, the eligible New Mexico PRAMS population size was smaller than the number of live births reported by the New Mexico Bureau of Vital Records and Health Statistics. Each month, a stratified sample of eligible New Mexico mothers was randomly drawn (on average 140 new mothers) from eligible birth certificates at the New Mexico Bureau of Vital Record and Health Statistics. During 2012-2015, sampling was stratified by race and ethnicity with an oversampling of Native American mothers. From 2016 going forward, there was no deliberate oversampling of Native American mothers. Stratification for 2016-2018 was based on maternal education levels. Approximately one out of every 12 mothers residing in New Mexico with a recent live birth in NM was selected to receive a survey.

New Mexico PRAMS Response of Navajo Women, 2012-2018					
Year of Infants Birth	Numbers of Responses				
2012	92				
2013	158				
2014	145				
2015	123				
2016	101				
2017	81				
2018	100				



Many NM Navajo mothers reside in the NW quadrant of the state and within the boundaries of San Juan or McKinley counties.

PRAMS Data Collection

Each year, those new mothers who were sampled to receive a survey were mailed a survey up to three times between two to six months after delivery. The survey participation was voluntary. Survey recipients were asked to complete the survey and mail it back to the New Mexico PRAMS program. The mailed survey included a cover letter, questionnaire booklet, a return envelope with postage, a question and answer sheet about PRAMS, a list of community resources for families and newborns, an incentive, and an offer of a reward (\$20 gift card) for participation. Those mothers who did not return the survey booklet were called and asked to complete the survey by telephone and were also given a toll-free number to call at any time. The mailings started two to six months after birth, and telephone interviews ended 90 days after the first mailing. After data collection for the birth year ended the survey data were managed by the CDC for cleaning and statistical weighting. The CDC then returned the weighted data to New Mexico PRAMS, where local staff then performed data cleaning and analyzed data for New Mexico PRAMS surveillance reports; the latest statewide New Mexico PRAMS report covered births from the years 2016-2018.

The PRAMS Questionnaire

The CDC coordinates the PRAMS questionnaire that consists of two parts: a core portion that was the same for all participating states and a state-specific portion that was tailored to New Mexico's needs. Topics of the core portion included:

Timing of Prenatal Care

Early infant care and breastfeeding

Economic status (federal poverty level, employment, number of dependents)

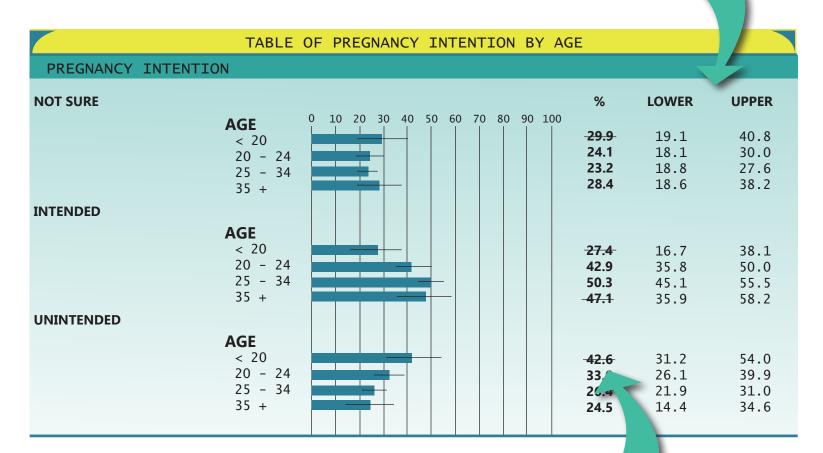
Health status

Obstetric history

How to Read the Tables in this Report

What is a Confidence Interval? In the tables the Confidence Interval is depicted by a dark line on the end of each bar on the graphs (the narrow line drawn within the green bar). As with all surveys, there is some uncertainty associated with the results because not every NM Navajo mother completed the survey. This uncertainty is represented by error bars depicting confidence intervals. Confidence Intervals vary between narrower intervals (more precise) and wider intervals (less precise). The tables in this report are based on a 95% Confidence Interval with the span of the interval indicating how much variation there is in the range for the point value. For example, in the sample page below, the actual percentage of NM Navajo Mothers who took a multivitamin every day shows that the estimate ranged from (XX% to XX%). A very wide interval, especially those wider than 15 percentage points, indicates that the value is less precise and, therefore, must be used with caution. A narrow confidence indicates that the data are considered more precise and, therefore, more stable. Determination of stability is based on several statistical factors, including the sampling population and number of respondents answering for each indicator.

In this report, the "Lower" and "Upper" values are error margins of a 95% confidence interval.



A strikethrough in the values indicates a large margin of error, indicating that caution should be used with those data.

Comparison of stressful live events before Delivery: Navajo and all NM Moms

Maternal Stressful Life Experiences	NM Navajo Mothers (n=507) %	NM all moms (n=5,320) %
	Stress During Pregnancy	
Partner-related Stress	35.4	29.5
Maternal Stressful Life Experiences	NM Navajo Mothers (n=510) % Stress During Pregnancy	NM all moms (n=5,320) %
Emotional Stress	33.0	35.1
Maternal Stressful Life Experiences	NM Navajo Mothers (n=509) %	NM all moms (n=5,322) %
	Stress During Pregnancy	
Traumatic Stress	30.5	20.0
Maternal Stressful Life Experiences	NM Navajo Mothers (n=507) %	NM all moms (n=5,324) %
	Stress During Pregnancy	
Financial Stress	55.6	56.0

Discussion

The report can be used to compare and monitor over time the behaviors and experiences of Navajo mothers throughout the course of pregnancy. The report highlights important findings about Navajo maternal and infant health concerns during pregnancy.

Preconception Behavior and Experiences

The prevalence of Navajo mothers who did not take any vitamins prior to pregnancy was 62% for all ages. The consumption of vitamins during pregnancy is essential for the health of the mother and the development of the fetus. Most vitamins contain essential nutrients, for example, folic acid has been proven to prevent birth defects, such as neural tube defects.

The prevalence of an unintended pregnancy was greatest among Navajo mothers 20 years of age and younger with less than a high school education.

Risk behaviors are important to assess during pregnancy so healthcare professionals and providers can implement interventions and provide appropriate care. According to the report, Navajo mothers of all ages had a prevalence of 30% for smoking before pregnancy, 18% for alcohol use before pregnancy, and 10% of experiencing intimate partner abuse before or during pregnancy.

Prenatal Behaviors and Experiences

Pregnancy is an opportunity to assess the health of the mother and baby to ensure minimal health risk. According to the report, 66% Navajo mothers received prenatal care during the first trimester. Prenatal care may include education on safe medications, healthy/unhealthy behaviors, breastfeeding, and maternal/fetal screenings. Additionally, more than two-thirds (73%) of Navajo mothers of all ages received their flu shot 12 months before delivery.

Oral health is associated with gestational age (number of weeks of pregnancy before delivery), and good oral health might help prevent a preterm birth. Approximately, 44% of Navajo mothers of all ages have visited a dentist and have had their teeth cleaned during pregnancy.

In addition to addressing risky behaviors, prevention and management of chronic health conditions are a priority to reduce negative health effects on mother and baby. The report indicated that 33% of Navajo mothers 35 years of age and older developed gestational diabetes.

Postpartum Behaviors and Experiences

During the postpartum phase, it is important to have consistent and proper use of contraception to prevent unintended and unwanted pregnancies. Postpartum contraception use was greater among women between the ages of 20-24 (80%).

Breastfeeding provides health benefits for both mother and baby. Navajo mothers who breastfed for more than 2 months was highest among those 35 years of age and older (78%). The finding suggests more Navajo mothers are encouraged to prolong breastfeeding as long as they can.

Postpartum checkups are important for AI/AN women because AI/AN women are two to three times more likely to die from pregnancy-related causes compared to any other race/ethnicity². The report indicated a greater percentage of Navajo mothers were more likely to go to their postpartum checkups. Additionally, postpartum depression was assessed during postpartum checkups. Among Navajo mothers who were most likely to experience postpartum depression were younger than 20 years of age, had less than a high school education, and earned less than 100% of the federal poverty level.

Conclusion

The findings indicate a need for the development and implementation of early maternal and child health education, addressing maternal and child health disparities, and to develop appropriate culturally tailored intervention programs for Navajo mothers. Collectively, the report also serves to provide maternal and infant health information to healthcare professionals and healthcare providers to promote healthy pregnancies and birth outcomes.

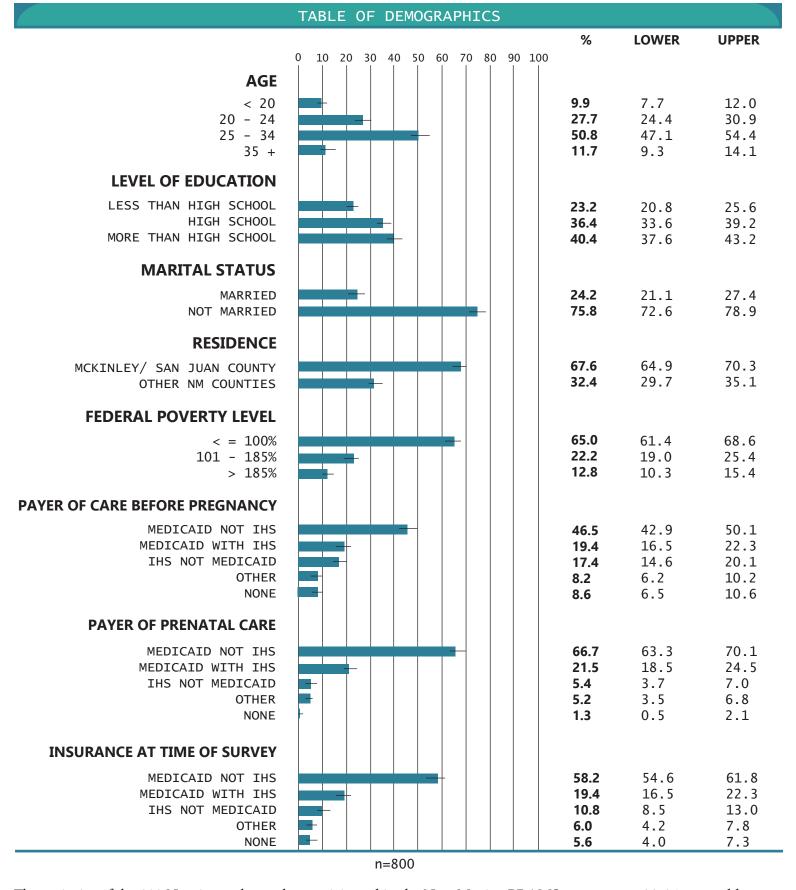
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- 1. Jeffcoat M, Geurs N, Reddy M, Cliver S, Goldenberg R, Hauth J. Periodontal infection and preterm birth: results of a prospective study. J Am Dent Association. 2001 July; 132(7); 875-80.
- 2. Centers for Disease Control and Prevention. (2020, August 04). Pregnancy-Related Deaths in the United States. Retrieved from https://www.cdc.gov/hearher/pregnancy-related-deaths/index.html

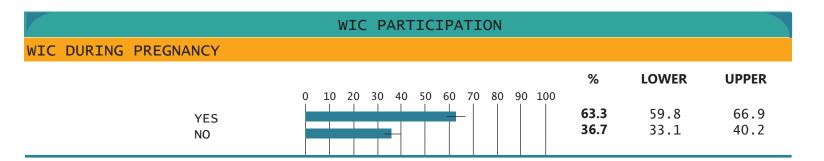
DEMOGRAPHICS

Demographics are the characteristics of a population. For this report, the population is comprised of 800 Navajo mothers who participated in the New Mexico (NM) Pregnancy Risk Assessment Monitoring System (PRAMS) Survey from 2012-2018. Demographics collected are age, level of education, marital status, county of residence, income, payer of care/health insurance, and Women, Infants, and Children (WIC) program enrollment. The graphs on the next page illustrate the demographic characteristics about the NM Navajo mothers in this report which include the following:

- Most women were between the ages of 20 and 34.
- More women had more than a high school education.
- Most women were not married.
- More women resided in McKinley/San Juan counties.
- Most women had incomes below 100% of the Federal Poverty Level.
- More women had Medicaid without Indian Health Services during prenatal care and during the time of the survey as their payer of care.
- Most women had WIC services during and after their pregnancy



The majority of the 800 Navajo mothers who participated in the New Mexico PRAMS survey were 20-34 years old (78.5%), 36.4% had at least a high school education but not college, 75.8% were not married, 67.6% resided in McKinley/ San Juan counties (the two major New Mexico counties overlapping the Navajo Nation), and 65.0% had a low level of income. The majority of mothers was enrolled in the WIC program during pregnancy, and had Medicaid as the major payer of prenatal care.



WIC PARTICIPATION					
WIC POSTNATAL					
		0 10 20 30 40 50 60 70 80 90 100	%	LOWER	UPPER
	YES NO		74.0 26.0	70.8 22.8	77.2 29.2

TABLE OF CONTENTS

Introduction

Methodology

Demographics

	Demographics	
	Vitamin use Before Pregnancy	1
	Pregnancy Intention	5
	Smoking before Pregnancy	11
	Alcohol use before Pregnancy	14
	Smoking during Pregnancy	18
	Intimate Partner Abuse before or during Pregnancy	21
	Prenatal Care	25
	Flu Shot 12 months before Delivery	30
	Oral Health During Pregnancy	33
	Gestational Diabetes	36
	Baby's Stay in Hospital	39
	Breastfeeding Duration	43
	Infant Sleeps on Back	46
	Postpartum Contraception	49
	Postpartum Check up	52
	Postpartum Depression	55
_	Survey	58
	Glossary	73

VITAMIN USE BEFORE PREGNANCY

A daily regimen of vitamins is essential to a healthy pregnancy. Prenatal vitamins, according to the American Pregnancy Association, are vital for proper fetal growth and development. Taking a vitamin rich in folic acid, calcium and iron is important to the health and development of the baby. Folic acid vitamins taken before pregnancy are recommended to prevent neural tube defects (Mayo Clinic, 2019).

Historically, Navajo mothers have not had the necessary nutrients provided by daily multivitamins. The causes leading to Navajo mothers not receiving necessary nutrients is driven by lack of access to multivitamins and health promotion (De La Rosa, et al, 2020). However, there has been at least a 4% increase in multivitamin intake when reviewing the most recent data compared with the 2000-2004 Navajo PRAMS report. Over the last 30 years there has been notable improvement in the daily intake of vitamins among Navajo women, especially intake of B vitamins (De La Rosa, et al, 2020).

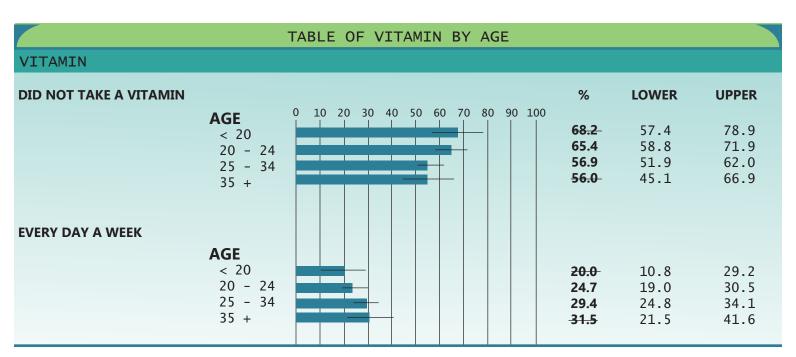
Sources:

American Pregnancy Association. (2020, September 12). Prenatal Vitamins. Retrieved from https://americanpregnancy.org/healthy-pregnancy/pregnancy-health-wellness/prenatal-vitamins-990 De La Rosa, V.Y., Hoover, J., Hoover, Du, R., Jimenez, E.Y., MacKenzie, D., NBCS Study Team, & Lewis, J. (2020, July). Diet quality among pregnant women in the Navajo Birth Cohort Study. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/32026554

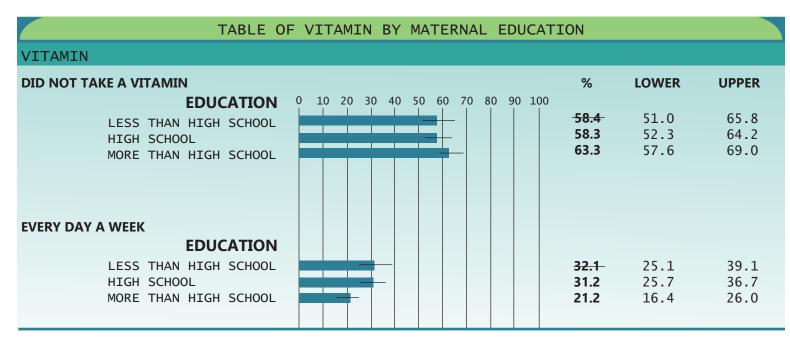
Mayo Clinic Staff. (2019, December 19). Pregnancy diet: Focus on these essential nutrients. Retrieved from https://www.mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/in-depth/pregnancy-nutrition/art-20045082

The graphs show the following about the New Mexico Navajo mothers in this report:

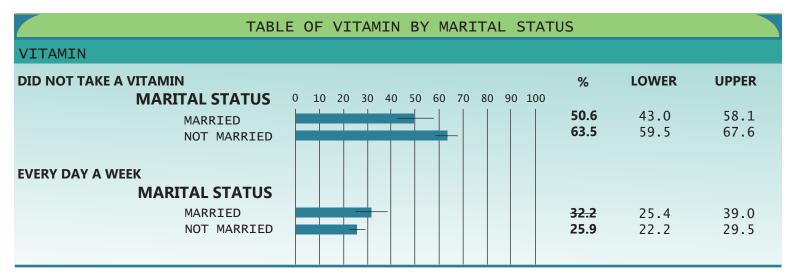
- A greater percentage of women under the age of 20 did not take vitamins compared to those older than 20 years of age prior to pregnancy.
- Women with more than a high school education were slightly more likely to take a vitamin prior to pregnancy compared to those who had less than a high school education.
- Vitamin consumption did not vary by county of residence
- Married women were more likely to take a preconception vitamin compared to unmarried women.
- There was no notable difference in vitamin consumption by Federal Poverty Level.
- There was no difference among women with WIC benefits during pregnancy and taking a vitamin prior to pregnancy.



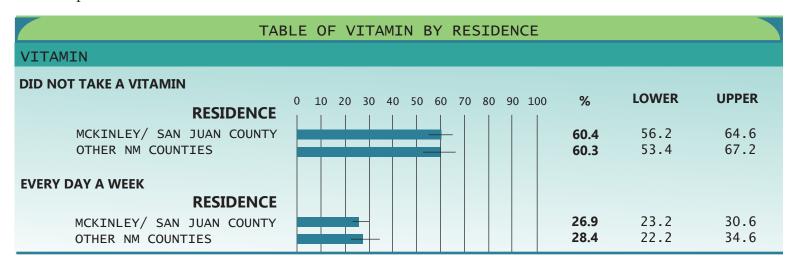
This table shows Navajo women's vitamin uptake by maternal age. A greater percentage of Navajo women under the age of 20 did not take vitamins before pregnancy. A greater percentage of Navajo women aged 35 and older took vitamins every day of the week. This data does not show a statistical association between maternal age and vitamin uptake.



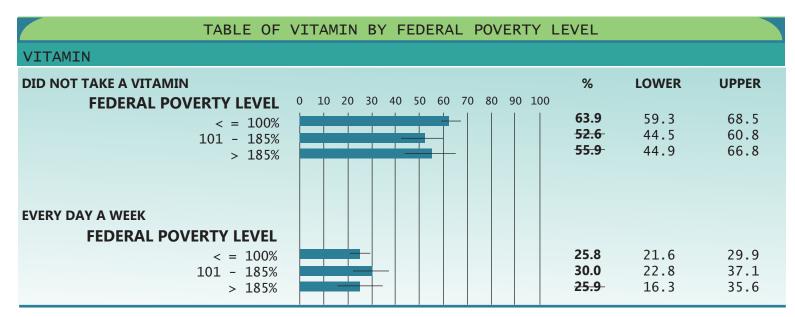
This table shows Navajo women's uptake of vitamins by maternal education level. A greater percentage of Navajo women with more than a high school education took vitamins before pregnancy. This data does not show a statistical association between maternal education level and vitamin uptake.



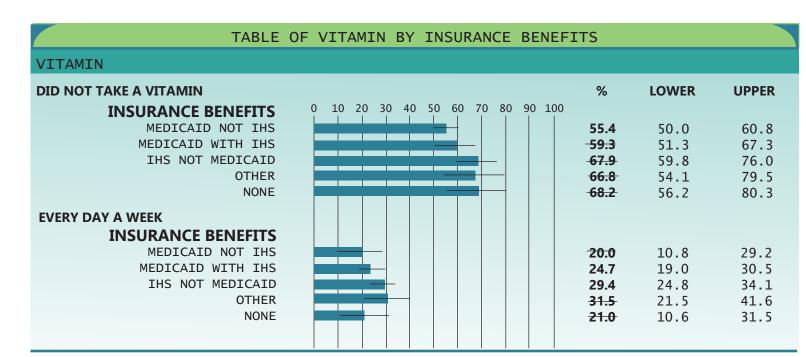
This table shows Navajo women's uptake of vitamins by marital status. A greater percentage of unmarried Navajo women did not take a vitamin before pregnancy. This data shows a statistically significant association between marital status and vitamin uptake.



This table shows Navajo women's uptake of vitamins by area of residence. This data does not show a statistical association between county of residence and vitamin uptake.



This table shows Navajo women's uptake of vitamins by Federal Poverty Level (FPL). A greater percentage of Navajo women with incomes less than 100% of the FPL did not take vitamins before pregnancy. This data shows a statistically significant association between FPL and vitamin uptake.



This table shows Navajo women's uptake of vitamins by payer of care before their pregnancy. A greater percentage of Navajo women with no payer of care did not take a vitamin before their pregnancy. This data does not show a statistical association between payer of care and vitamin uptake.

WIC PARTICIPATION					
DID NOT USE VITAMINS					
		%	LOWER	UPPER	
	YES NO	60.5 60.6	55.9 54.6	65.0 65.0	

This table shows Navajo women's uptake of vitamins by WIC service before their pregnancy. There was no statistical association between WIC service and vitamin uptake.

PREGNANCY INTENTION

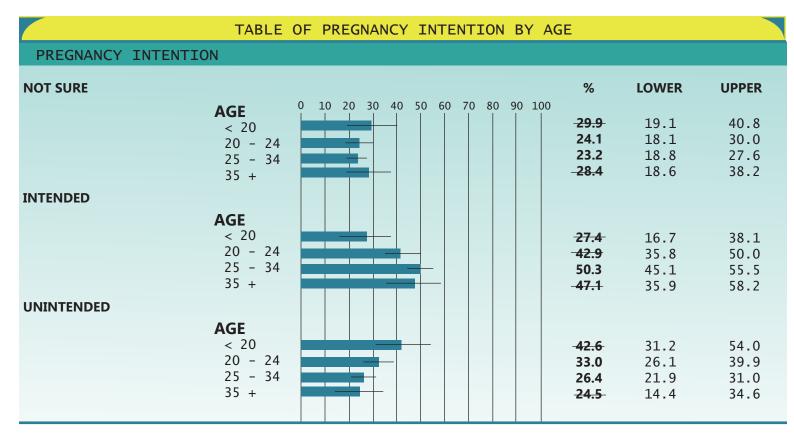
According to the CDC, an unintended pregnancy is either mistimed (happened earlier than desired) or unwanted. Unintended pregnancy is a reproductive public health concern because it impacts many different outcomes for both mother and child. Women who had pregnancies that were unwanted or were markedly earlier than wanted, and women who were unsure about their pregnancy, suffered numerous deleterious outcomes and behaviors, including intimate partner violence (IPV), depression, tobacco consumption, lack of early prenatal care, and lack of postpartum care (Mark & Cowan, 2022; Cruz-Bendezú et al., 2020).

Sources:

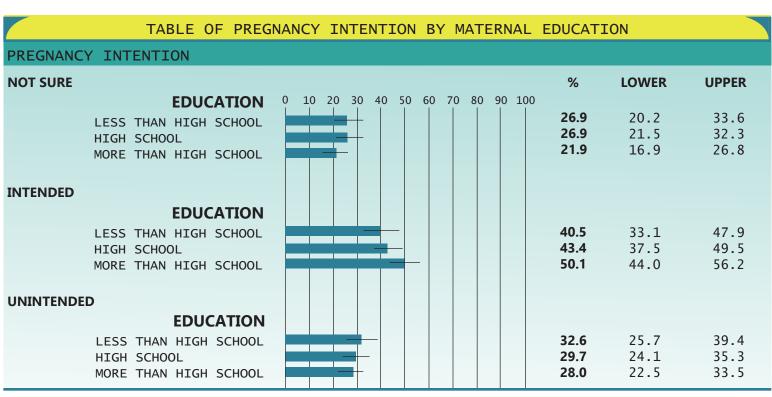
CDC. (2019, September 12). Unintended Pregancy. Retrieved from https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/index.htm Cruz-Bendezú, A. M., Lovell, G. V., Roche, B., Perkins, M., Blake-Lamb, T. L., Taveras, E. M., & Simione, M. (2020). Psychosocial status and prenatal care of unintended pregnancies among low-income women. BMC Pregnancy and Childbirth, 20(1), 615. https://doi.org/10.1186/s12884-020-03302-2 Finer, L. B., & Zolna, M. R. (2011). Unintended pregnancy in the United States: incidence and disparities, 2006. Contraception, 84(5), 478-485. https://doi.org/10.1016/j.contraception.2011.07.013 Mark, N. D. E., & Cowan, S. K. (2022). Do Pregnancy Intentions Matter? A Research Note Revisiting Relationships Among Pregnancy, Birth, and Maternal Outcomes. Demography, 59(1), 37–49. https://doi.org/10.1215/00703370-9710311

Unintended pregnancy was greatest among those who:

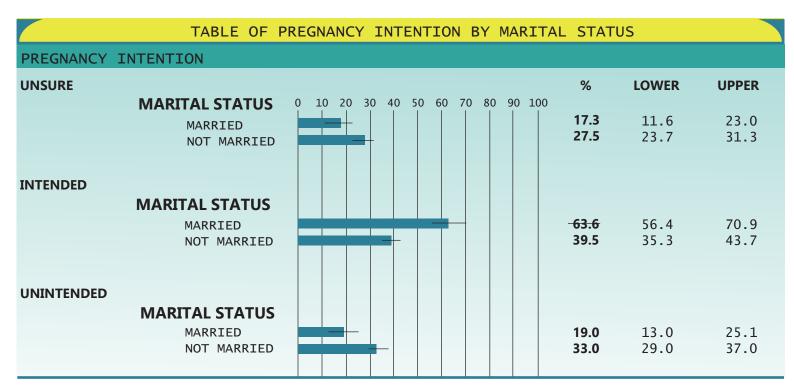
- Were under the age of 20
- Had less than a high school education
- Were not married
- Lived in McKinley and San Jaun counties
- Earned household incomes less or equal to 100% of federal poverty level
- Had Indian Health Services without Medicaid coverage
- Did not have WIC after delivery



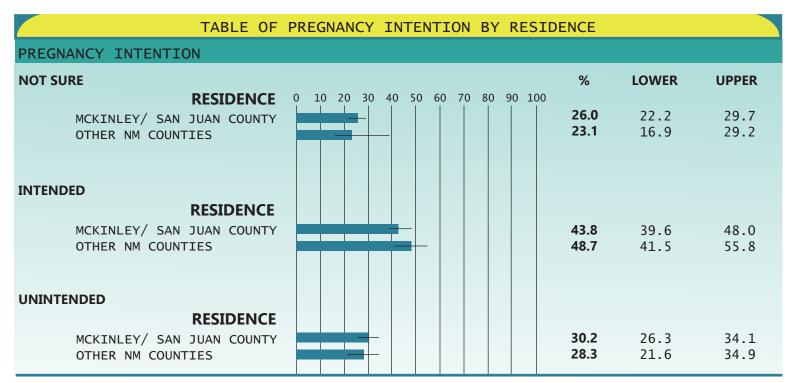
This table shows Navajo women's pregnancy intention by maternal age. A greater percentage of Navajo women under 20 years of age were unsure about their pregnancy intent. Navajo women at least 25 years of age or older were more likely to have intended pregnancies. Navajo women under 20 years of age were more likely to have unintended pregnancies. This data shows a statistically significant association between pregnancy intention and maternal age.



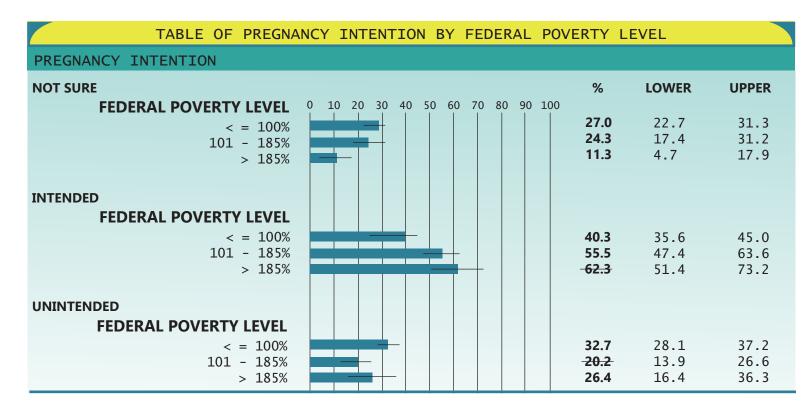
This table shows Navajo women's pregnancy intention by maternal education. A greater precentage of Navajo women with a high school education or less were not sure of their pregnancy intention. A greater percentage of Navajo women with more than a high school education level were more likely to have intended pregnancies. This data does not show a statistical association between maternal education and pregnancy intention.



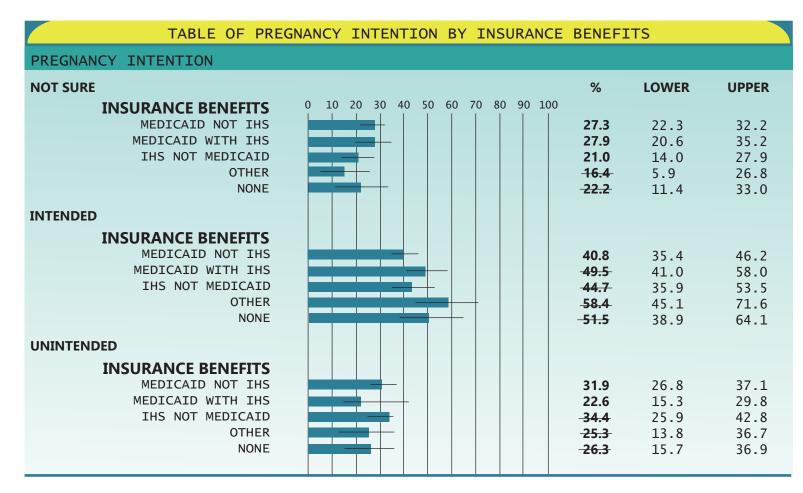
This table show Navajo women's pregnancy intention by marital status. A greater precentage of unmarried Navajo women were not sure of their pregnancy intention. A greater percentage of married Navajo women had intended pregnancies and a greater percentage of unmarried Navajo women had unintended pregnancies. This data shows a statistically significant association between marital status and pregnancy intention.



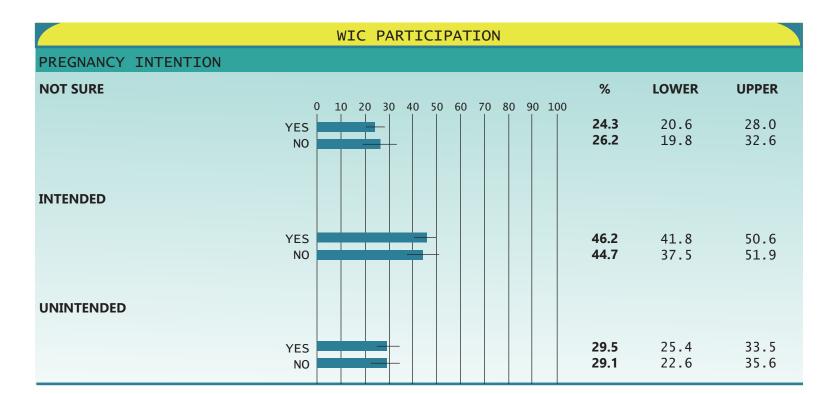
This table shows Navajo women's pregnancy intention by area of residence. According to the table, there was a greater percentage of Navajo women who were not sure of their pregnancy intention residing in McKinley/San Juan counties. A greater percentage of Navajo women residing in other NM counties had more intended pregnancies. A greater percentage of Navajo women residing in McKinley/San Juan counties had unintended pregnancies. This data does not show a statistical association between area of residence and pregnancy intention.



This table shows Navajo women's pregnancy intention by Federal Poverty Level (FPL). A greater percentage of Navajo women that earned less than 100% of the FPL were not sure of their pregnancy intention. A greater percentage of Navajo women that earned more than 185% of the FPL were more likely to have an intended pregnancy. A greater percentage of Navajo women that earned less than 100% of the FPL had an unintended pregnancy. This data shows a statistically significant association between FPL and pregnancy intention.



This table shows Navajo women's pregnancy intention by payer of care. A slightly larger percentage of Navajo women that had Medicaid with Indian Health Services as their payer of care were not sure about their pregnancy intention. A greater percentage of Navajo women that intended their pregnancy had other payer of care benefits. A greater percentage of Navajo women with Indian Health Services not Medicaid as their payer of care had an unintended pregnancy. This data does not show a statistical association between payer of care and pregnancy intention.



This table shows Navajo women's pregnancy intention by WIC service during their postnatal period. A greater percentage of Navajo women that were not sure of their pregnancy intention did not have WIC services during their postnatal period. A greater percentage of Navajo women that had an intended pregnancy had WIC services during their postnatal period. This data does not show a statistical association between WIC service during the postnatal period and pregnancy intention.

SMOKING BEFORE PREGNANCY

Smoking cigarettes before pregnancy is associated with adverse effects on reproductive health including decreased fertility, preterm births, and/or miscarriages (Kondracki, 2019; Liu et al, 2020).

Smoking before pregnancy is a public health concern because of adverse effects and the smoking prevalence before pregnancy has not changed substantially (Kondrack, 2019). Those that smoke at a high intensity rate (10+ cigarettes/day), have lower rates of cessation before and during pregnancy, which has been associated with adverse effects to maternal and child health (Kondracki, 2019). American Indian/Alaska Native (AI/AN) populations have higher smoking rates before pregnancy when compared with other races/ethnicities (Curtin and Matthews, 2016). AI/AN populations had lower smoking cessation rates before pregnancy when compared to other races/ethnicities (Curtin and Matthews, 2016). It is important for women who smoke before pregnancy to understand they are at high risk for reduced fertility, preterm births and/or miscarriages; which are adverse outcomes.

Sources:

Curtin, S., & Matthews, T. (2016). Smoking Prevalence and Cessation Before and During Pregnancy: Data From the Birth Certificate, 2014 (1st ed., Vol 65, Rep.). Hyattsville, MD: Centers for Disease Control and Prevention.

Kondrack, A. (2019, September 13). Prevalence and patterns of cigarette smoking before and during early and late pregnancy according to maternal characteristics: The first national data based on the 2003 birth certificate revision, United States, 2016. Reproductive Health, 16 (142).

Doi:https://doi.org/10.1186/s12978-019-0807-5

Liu, B., Xu, G., Qiu, X., Ryckman, K., Yu, Y., Snetselaar, L., & Bao, W. (2020). Maternal cigarette smoking before and during pregnancy and the risk of preterm birth: A dose-response analysis of 25 million mother-infant paris. PLOS Medicine, 17(8).

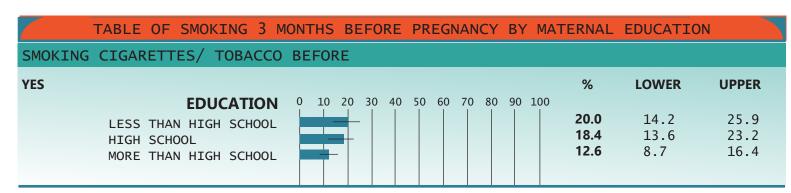
Doi:https://doi.org/10.1371/journal.pmed.1003158

Those with the highest prevalence of smoking before pregnancy were:

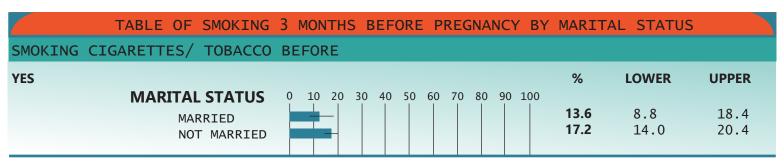
- Under the age of 20
- Had less than a high school education
- Unmarried
- Residing outside San Juan or McKinley Counties
- Those with household incomes at or below 100% of Federal Poverty Level
- Recipients of Indian Health Services without Medicaid coverage
- WIC recipients



This table shows Navajo women that smoked cigarettes 3 months before pregnancy by age. According to the table, a slightly larger percentage of Navajo women less than 20 years of age had smoked 3 months before pregnancy. This data does not show a statistical association between maternal age and smoking before pregnancy.



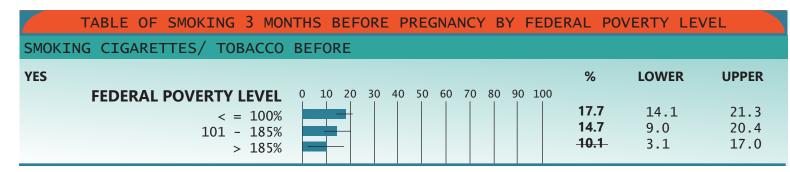
This table shows Navajo women that smoked cigarettes 3 months before pregnancy by maternal education level. According to the table, a greater percentage of Navajo women with less than a high school education that smoked 3 months before pregnancy followed by those with a high school education. This data does not show a statistical association between maternal education level and smoking before pregnancy.



This table shows Navajo women that smoked cigarettes 3 months before pregnancy by marital status. According to the table, a greater percentage of unmarried Navajo women smoked 3 months before pregnancy. This data does not show a statistical association between marital status and smoking before pregnancy.



This table shows Navajo women that smoked 3 months before pregnancy by area of residence. This data does not show a statistical association between areas of residence and smoking before pregnancy.



This table shows Navajo women that smoked 3 months before pregnancy by Federal Poverty Level (FPL). According to the table, there was a greater percentage of Navajo women that earned less than 100% of the FPL that smoked 3 months before their pregnancy. This data does not show a statistical association between FPL and smoking before pregnancy.

	TABLE OF SMOKING 3	MONTHS BE	FORE PRI	EGNANCY	BY I	ENSURANCE	BENEFITS	
SMOKING	G CIGARETTES/ TOBACC	O BEFORE						
YES						%	LOWER	UPPER
	INSURANCE BENEFITS MEDICAID NOT IHS MEDICAID WITH IHS IHS NOT MEDICAID OTHER	0 10 20	30 40 50	60 70 80	90 10	16.7 13.6 21.6 15.9	12.6 7.9 14.2 7.1	20.7 19.4 28.9 24.6

This table shows Navajo women that smoked 3 months before pregnancy by payer of care. There was a greater prevalence of smoking among those with Indian Health Services, but not Medicaid. This data does not show a statistical association between payer of care and smoking before pregnancy.

	WIC PARTICIPATION			
SMOKING BEFORE PREGNANCY				
		%	LOWER	UPPER
YES NO	0 10 20 30 40 50 60 70 80 90 100	17.4 14.4	13.8 10.2	20.9 18.7

This table shows Navajo women that smoked 3 months before pregnancy according to WIC services during pregnancy. A greater percentage of Navajo women with WIC services during pregnancy reported smoking 3 months before their pregnancy. This data does not show a statistical association between WIC service during pregnancy and smoking before pregnancy.

ALCOHOL USE BEFORE PREGNANCY

Alcohol use during pregnancy is unsafe, regardless of the type of alcohol, the amount consumed, or when it is consumed. Alcohol is dangerous to the baby as it passes through the mother's blood to the umbilical cord to the baby. Alcohol consumption is a public health concern as it results in a host of adverse effects from miscarriage, stillbirth, to lifelong disabilities known as Fetal Alcohol Spectrum Disorder (CDC, 2020). All adverse effects are preventable and the goal of Healthy People 2030 is to increase alcohol abstinence to 92.2% (ODPHP, 2020). American Indian/Alaska Native women are particularly vulnerable as historically there has been high rates of alcohol consumption (Navajo Epidemiology Center, 2020).

Sources:

CDC. (2020, October, 08). Alcohol Use in Pregnancy. Retrieved from

https://www.cdc.gov/ncbddd/fasd/alcohol-use.html

CDC. (2020, July 06). Fetal Alcohol Spectrum Disorders: Data & Statistics. Retrieved from

https://www.cdc.gov/ncbddd/fasd/data.html

Navajo Epidemiology Center. (2020). Navajo Nation Maternal and Child Health Needs Assessment

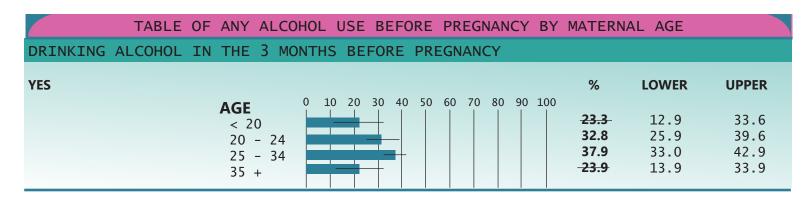
(pp. 1-71, Rep.). Window Rock, AZ. doi: https://www.nec.navajo-nsn.gov/Portals/0/Home

Webpage/MaternalChildHealth_V7_HiRez_Sept_30_20.pdf

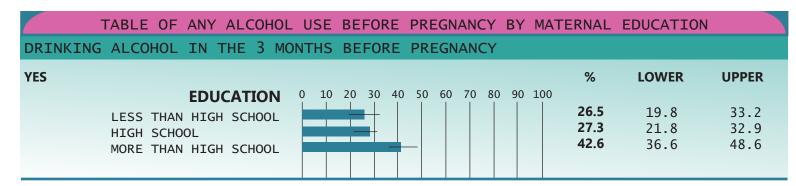
Office of Disease Prevention and Health Promotion. (2020). Increase abstinence from alcohol among pregnant women – MICH-09. Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/iincrease-abstinence-alcohol-among-pregnant women-mich-09

The graphs below show there was a higher prevalence of preconception alcohol use among those who were:

- Between the ages of 25 and 34.
- Had more than a high school education level.
- Were unmarried women.
- Resided in other New Mexico counties.
- Had incomes higher than 185% of the Federal Poverty Level.
- Had other sources for their payer of care/health insurance.
- Did not receive WIC services during their pregnancy.



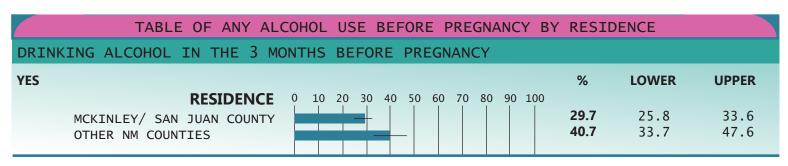
This table shows Navajo women's alcohol use 3 months before pregnancy by maternal age. According to the table, the greatest percentage of Navajo women that were between ages 25 and 34 reported that they consumed alcohol 3 months before their pregnancy. This data shows a statistically significant association between maternal age and alcohol use before pregnancy.



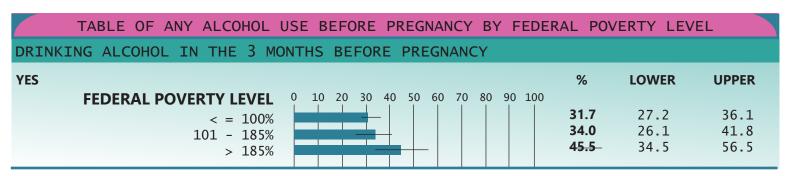
This table shows Navajo women's alcohol use 3 months before pregnancy by maternal education level. According to the table, the greatest percentage of Navajo women with more than a high school education reported that they consumed alcohol 3 months before their pregnancy. This data shows a statistically significant association between maternal education level and alcohol use before pregnancy.

TABLE OF ANY AL	COHOL USE E	BEFORE PREGNA	NCY BY M	MARITAL STA	ΓUS
DRINKING ALCOHOL IN THE 3 I	MONTHS BEFO	DRE PREGNANCY			
YES				% LOWE	R UPPER
MARITAL STATUS MARRIED NOT MARRIED		0 40 50 60 70 80 	90 100	32.9 25.7 33.4 29.3	

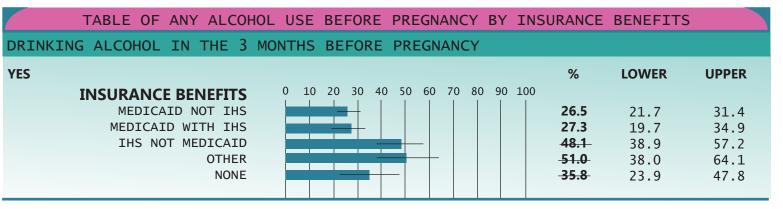
This table shows Navajo women's alcohol use 3 months before pregnancy by marital status. According to the table, a slightly larger percentage of unmarried Navajo women reported they consumed alcohol 3 months prior to their pregnancy. This data does not show a statistical association between marital status and alcohol use before pregnancy.



This table shows Navajo women's alcohol use 3 months before pregnancy by area of residence. According to the table, a greater percentage of Navajo women residing in other NM counties consumed alcohol 3 months prior to their pregnancy. This data shows a statistically significant association between area of residence and alcohol use before pregnancy.



This table shows Navajo women's alcohol use 3 months before pregnancy by Federal Poverty Level (FPL). According to the table, a greater percentage of Navajo women earning more than 185% of the FPL reported they consumed alcohol 3 months prior to their pregnancy. This data does not show a statistical association between FPL and alcohol use before pregnancy.



This table shows Navajo women's alcohol use 3 months before pregnancy by payer of care. A greater percentage of Navajo women with other sources as payer of care reported consumption of alcohol 3 months prior to their pregnancy. This data shows a statistically significant association between payer of care and alcohol use before pregnancy.

	WIC PARTICIPATION			
DRINKING BEFORE PREGNANCY				
	0 10 20 30 40 50 60 70 80 90 100	%	LOWER	UPPER
YES NO		32.4 34.9	27.9 29.1	36.9 40.7

This table shows Navajo women's alcohol use 3 months before pregnancy by WIC services during pregnancy. According to the table, a greater percentage of Navajo women without WIC services consumed alcohol 3 months prior to their pregnancy. This data does not show a statistical association between WIC services and alcohol use before pregnancy.

SMOKING DURING PREGNANCY

Smoking during pregnancy, whether it be cigarettes, pipes, cigars, or e-cigarettes, can have adverse effects on a woman's pregnancy including the health of the baby. Adverse effects on the pregnancy include miscarriage, an ectopic pregnancy which can lead to miscarriage, placental abruption which can cause bleeding and loss of oxygen and nutrients to the baby, placenta previa which can cause severe bleeding during pregnancy and delivery, preeclampsia which can cause placental abruption and premature births, which impact the overall health of the newborn. Birth defects associated with smoking during pregnancy include damaged lungs and brain, cleft lip, and cleft palate (or both). In 2021, birth defects among Native Americans was 9.1/10,000 live births, the highest percentage of any population in New Mexico including cleft lip with cleft palate. Smoking during pregnancy is a significant public health concern as it has dramatic impacts on both mother and child. Smoking is of specific concern in Navajo women as the population demonstrates a notable disparity to their counterparts. Finally, the premature birth rate was 11% in 2017 among Navajo populations and the Healthy People 2030 goal is 9.4% (Navajo Nation Maternal and Child Health Needs Assessment,2020; Healthy People 2030, 2025). The goal of Healthy People 2030 is to increase prenatal smoking abstinence by 2.2% from 93.5% to 95.7%. Increasing prenatal smoking abstinence can help improve the pregnancy and birth outcomes and infant health (Healthy People 2030, 2025).

Sources:

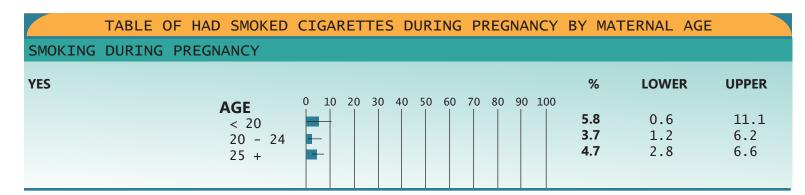
Navajo Epidemiology Center. (2020). 2020 Navajo Nation Maternal and Child Health Needs Assessment (pp. 1-71, Rep.). Window Rock, AZ. Doi:https://www.nec.navajonsn.gov/Portals/0/Home Webpage/MaternalChildHealth_V7_HiRez_Sept_30_20.pdf ODPHP, O. of D. P. and H. P. (2025). Increase abstinence from cigarette smoking among pregnant women - mich-10. Increase abstinence from cigarette smoking among pregnant women - MICH-10 - Healthy People 2030.

https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth/increase-abstinence-cigarette-smoking-among-pregnant-women-mich-

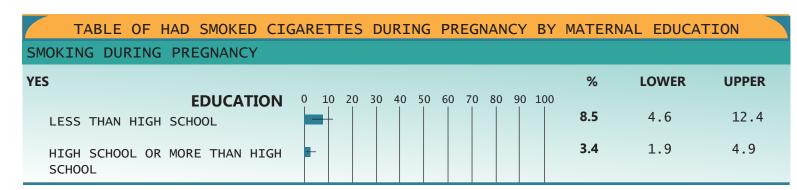
10#:~:text=96.3%20percent%20(2022),detailed%20data%20for%20this%20objective

Smoking during pregnancy was highest for those under 20 years of age compared to older women; Higher rates were also observed among those who

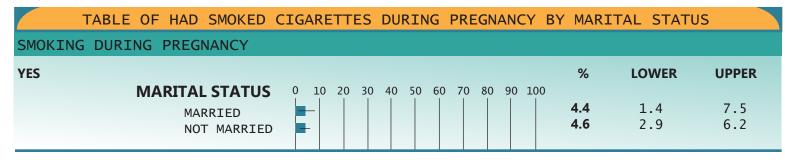
- Had less than a high school education
- Lived outside San Juan or McKinley Counties
- Had a household income equal to or less than 100% of the Federal Poverty Level
- Had Indian Health Services but not Medicaid as payer of care
- Had WIC services



This table shows Navajo women that smoked cigarettes during pregnancy by maternal age. According to the table, there was a slightly larger percentage of Navajo women less than 20 years of age that smoked cigarettes during their pregnancy. This data does not show a statistical association between maternal age and smoking during pregnancy.



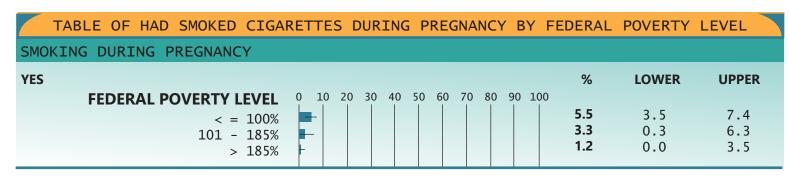
This table shows Navajo women that smoked cigarettes during pregnancy by maternal education. According to the table, a greater percentage of Navajo women with less than a high school education smoked cigarettes during their pregnancy. This data shows a statistically significant association between maternal education and smoking during pregnancy.



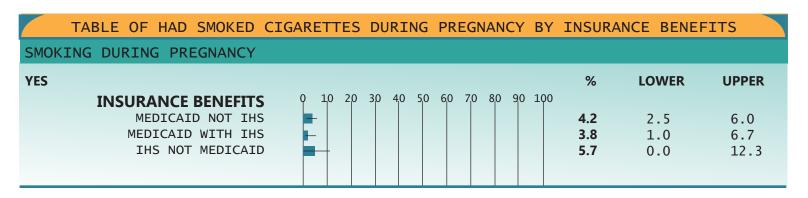
This table shows Navajo women that smoked cigarettes during pregnancy by marital status. This data does not show a statistical association between marital status and smoking during pregnancy.

TABLE OF HAD SMOKED CIGARETTES DURING PREGNANCY	BY	RESIDENCE	
SMOKING DURING PREGNANCY			
YES	%	LOWER	UPPER
MCKINLEY/ SAN JUAN COUNTY OTHER NM COUNTIES	3.9 5.8	2.3	5.5 8.9

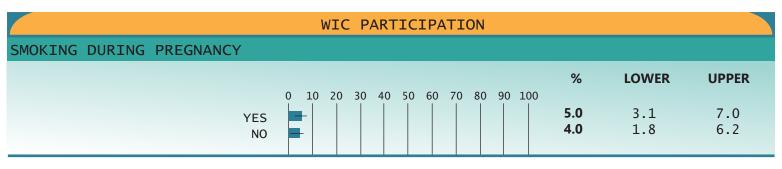
This table shows Navajo women that smoked cigarettes during pregnancy by area of residence. According to the table, there was a greater percentage of Navajo women residing in other NM counties that smoked cigarettes during their pregnancy. This data does not show a statistical association between area of residence and smoking during pregnancy.



This table show Navajo women that smoked cigarettes during pregnancy by Federal Poverty Level (FPL). According to the table, a greater percentage of Navajo women that earned less than 100% of the FPL smoked cigarettes during their pregnancy. This data does not show a statistical association between FPL and smoking during pregnancy.



This table shows Navajo women that smoked cigarettes during pregnancy by payer of care. According to the table, a slightly larger percentage of Navajo women with Indian Health Services but not Medicaid as their payer of care smoked during their pregnancy. This data does not show a statistical association between payer of care and smoking during pregnancy.



This table shows Navajo women that reported smoking during pregnancy according to WIC service during their pregnancy. According to the table, a slightly larger percentage of Navajo women with WIC services reported smoking during their pregnancy. This data does not show a statistical association between WIC service and smoking during pregnancy.

INTIMATE PARTNER ABUSE BEFORE OR DURING PREGNANCY

Intimate partner abuse during pregnancy can have detrimental effects on both the woman and unborn fetus. According to the American College of Obstetricians and Gynecologists (ACOG), intimate partner abuse is a pattern of threatening or controlling behavior where the partner is abused on purpose and more than once. Intimate partner abuse includes hitting, slapping, kicking, choking, pushing, and/or pulling hair. Sometimes abusers focus their violence towards the pregnant woman's belly (March of Dimes, 2020). Most cases of domestic abuse are not reported and most victims are women. Furthermore, 1 in 6 women first experience intimate partner abuse during pregnancy (March of Dimes, 2020). Intimate partner abuse of pregnant women is a public health concern as it can dangerously impact both the mother and unborn baby.

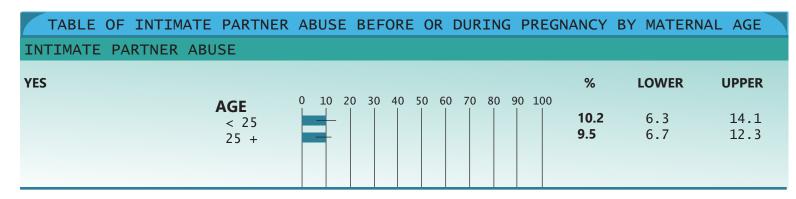
The dangers include: stillbirth, miscarriages, perinatal deaths, vaginal bleeding, pelvic fractures, placental abruption, fetal injury, preterm delivery, and babies born with low birth weights (ACOG, 2020). Native American and Alaska Native women are more at risk for intimate partner abuse during pregnancy, therefore it is important to collect data to be able to determine programs to help reduce dangerous outcomes (National Congress of American Indians, 2013).

Sources:

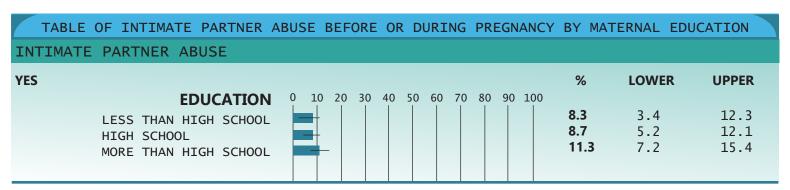
American College of Obstetricians and Gynecologists. (2020, January). Intimate Partner Violence. Retrieved from https://www.acog.org/womens-health/faqs/intimate-partner-violence March of Dimes. (2020). Abuse during pregnancy. Retrieved from https://www.marchofdimes.org/pregnancy/abuse-during-pregnancy.aspx National Congress of American Indians. (2013). Statistics on Violence Against Native Women. Retrieved from https://www.ncai.org/

The graphs below show the following about the New Mexico Navajo mothers in this report:

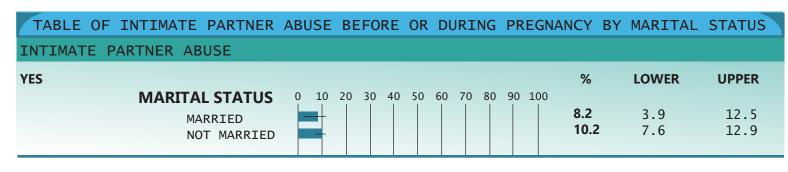
- Slightly more women were less than 25 years of age experienced abuse before or during pregnancy compared to those over 25.
- More women with more than a high school education than those with lower education levels experienced abuse before or during pregnancy.
- Slightly more unmarried than married women experienced abuse before or during pregnancy.
- Slightly more women residing in Mckinley or San Juan counties than those outside experienced abuse before or during pregnancy.
- A higher proportion with household incomes at or below 100% of the Federal Poverty Level experienced abuse before or during pregnancy compared to those with higher income levels.



This table shows intimate partner abuse before or during pregnancy by maternal age. According to the table, a slightly larger percentage of Navajo women under 25 years of age experienced intimate partner abuse compared to Navajo women who were older than 25 years of age. This data does not show a statistical association between maternal age and intimate partner abuse before or during pregnancy.



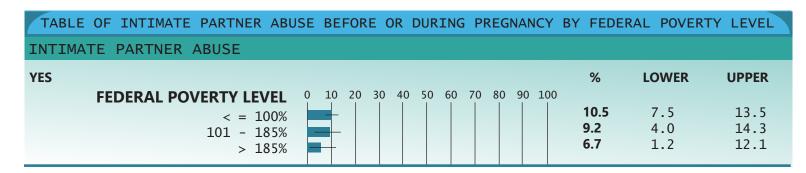
This table shows intimate partner abuse before or during pregnancy by maternal education. According to the table, a greater percentage of Navajo women with more than a high school education were more likely to report abuse before or during their pregnancy. This data does not show a statistical association between maternal education and physical abuse before or during pregnancy.



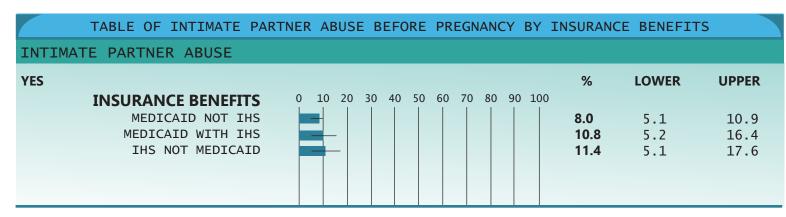
This table shows intimate partner abuse before or during pregnancy by marital status. According to the table, a greater percentage of unmarried Navajo women experienced abuse before or during their pregnancy. This data does not show a statistical association between marital status and intimate partner abuse before or during pregnancy.

TABLE OF INTIMATE PART	TNER ABUSE	BEFORE (OR DURING	PREGNANCY	BY RESIDE	ENCE
INTIMATE PARTNER ABUSE						
YES RESIDENCE	CF 0 10 20	30 40 50	60 70 80 90	%	LOWER	UPPER
MCKINLEY/ SAN JUAN COUN' OTHER NM COUNTIES				10.0	7.4 4.9	12.7 13.4

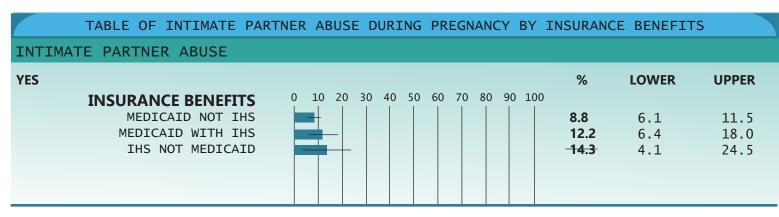
This table shows intimate partner abuse before or during pregnancy by area of residence. According to the table, a slightly larger percentage of Navajo women residing in McKinley/San Juan counties reported abuse before or during their pregnancy. This data does not show a statistical association between area of residence and intimate partner abuse before or during pregnancy.



This table shows intimate partner abuse before or during pregnancy by Federal Poverty Level (FPL). According to the table, a slightly larger percentage of Navajo women that earned less than 100% of the FPL experienced abuse before or during their pregnancy. This data does not show a statistical association between FPL and intimate partner abuse before or during pregnancy.



This table shows intimate partner abuse before pregnancy by payer of care. A greater percentage of Navajo women with Indian Health Services but not Medicaid as their payer of care reported abuse before their pregnancy. This data does not show a statistical association between payer of care and intimate partner abuse before pregnancy.



This table shows intimate partner abuse during pregnancy by payer of care. A greater percentage of Navajo women with Indian Health Services but not Medicaid as their payer of care reported abuse during their pregnancy. This data does not show a statistical association between payer of care and intimate partner abuse during pregnancy.



This table shows intimate partner abuse before or during pregnancy by WIC service during pregnancy. This data does not show a statistical association between WIC service and intimate partner abuse before or during pregnancy.

PRENATAL CARE

Pregnancy consists of three trimesters. During a trimester of pregnancy, it is important for the mother to receive consistent care for her health and the health of the baby as they are closely linked (WHO, 2013). The first trimester is crucial as the baby's structure and organs are developing and is the period when most miscarriages and birth defects occur (UCSF, 2021). The first trimester prenatal care should include a physical exam, lab tests, screenings for fetal abnormalities, and discussions on lifestyle behaviors (Mayo Clinic, 2020).

Prenatal care is important for public health because it reduces the chances of maternal and infant mortality. Additionally, quality prenatal care leads to healthy birth outcomes through early identification and treatment of developmental delays and disabilities in children so they can live to their full potential.

Disparities in access to prenatal care exist in the United States (US). According to the Annie E. Casey Foundation, American Indian women were less likely to receive prenatal care when compared to other women in the US. Access to prenatal care may be limited due to a lack of healthcare providers, a lack of or unreliable transportation, and household instability (Johnson, 2020). Lack of access to prenatal care is problematic as it may lead to adverse outcomes for Native American women and their children.

Sources:

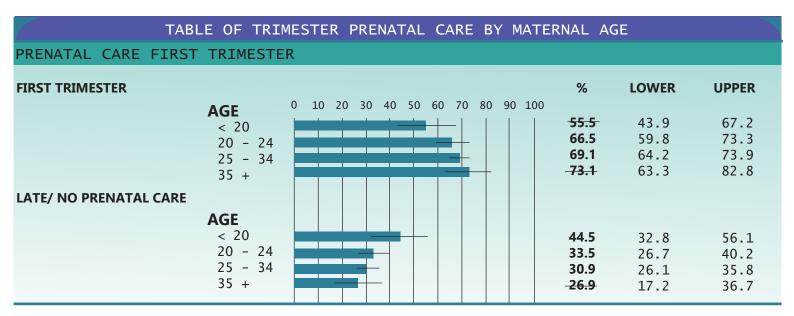
Healthy People 2020. (2020, October 8). Maternal, Infant, and Child Health. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health Johnson, M. (2020). Prenatal Care for American Indian Women. MCN, The American Journal of Maternal/Child Nursing, 45 (4), 221-227. doi: 10.1097/NMC.000000000000033.

Mayo Clinic Staff. (2020, August 7). Prenatal care: 1st trimester visits. Retrieved from https://www.mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/in-depth/prenatal-care/art-20044882 UCSF Health Obstetrics and Gynecology. (2021). Pregnancy the three trimesters. Retrieved from https://www.ucsfhealth.org/conditions/pregnancy/trimesters

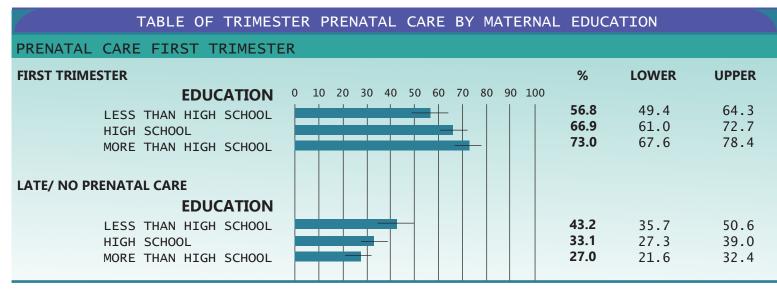
World Health Organization. (2013, October 22). Maternal and perinatal health. Retrieved from https://www.who.int/maternal_child_adolescent/topics/maternal/maternal_perinatal/en/

The graphs below show the following about the New Mexico Navajo mothers in this report:

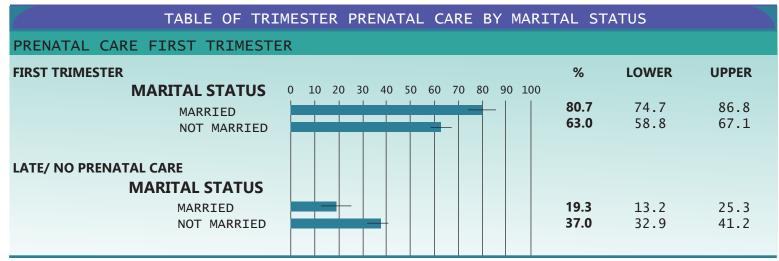
- Younger women were less likely to receive prenatal care in the first trimester compared to those over the age 21.
- Women with less than a high school education were less likely to receive prenatal care in the first trimester compared to those with a high school education or more.
- Unmarried women were less likely to receive prenatal care in the first trimester compared to those who were married.
- Those living outside San Juan or McKinley counties had a higher rate of prenatal care in the first trimester compared to those in San Juan or McKinley.
- Women who made less than 100% of the Federal Poverty Level were less likely to receive prenatal care in the first trimester compared to those who had higher income levels.
- Uninsured women were less likely to receive prenatal care in the first trimester compared to those who had insurance.
- A slightly higher proportion of women with WIC during their pregnancy were able to receive prenatal care during their first trimester.



This table shows when Navajo women began prenatal care by maternal age. According to the table, the greatest percentage of Navajo women older than 35 years of age began prenatal care during their first trimester. Fewer Navajo women less than 20 years of age began prenatal care in their first trimester compared to Navajo women older than 35 years of age. This data does not show a statistical association between maternal age and prenatal care during the first trimester of pregnancy. A greater percentage of Navajo women less than 20 years of age either began prenatal care after the first trimester or received no prenatal care during their pregnancy. Fewer Navajo women older than 35 years of age either began prenatal care after their first trimester or received no prenatal care during their pregnancy compared to Navajo women less than 20 years of age.

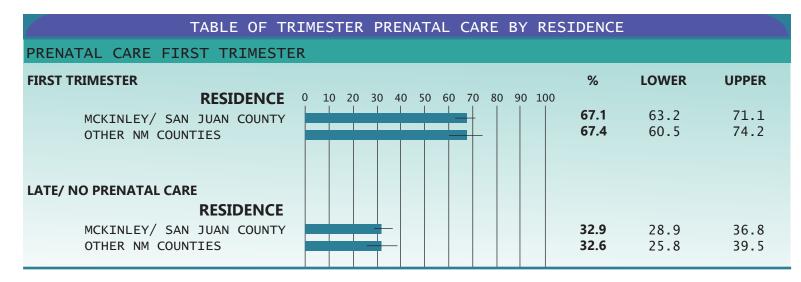


This table shows when Navajo women began prenatal care by maternal education. According to the table, the greatest percentage of Navajo women with more than a high school education began prenatal care during their first trimester. Fewer Navajo women with less than a high school education began prenatal care during their first trimester. This data shows a statistically significant association between maternal education and prenatal care during the first trimester of pregnancy. A greater percentage of Navajo women with less than a high school education either began their prenatal care after the first trimester or received no prenatal care. Fewer Navajo women with more than a high school education either began their prenatal care after the first trimester or received no prenatal care. This data shows a statistically significant association between maternal education and prenatal care after the first trimester.

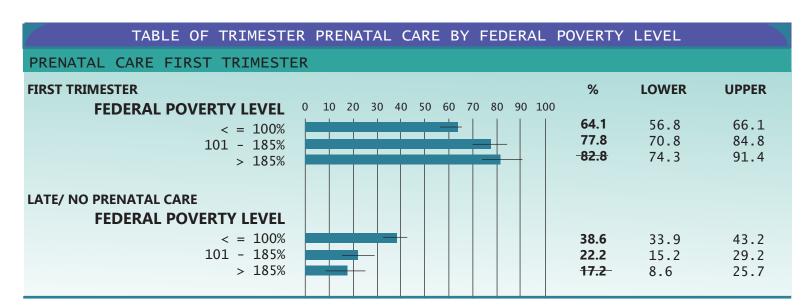


*Some data instability may be represented in the table above.

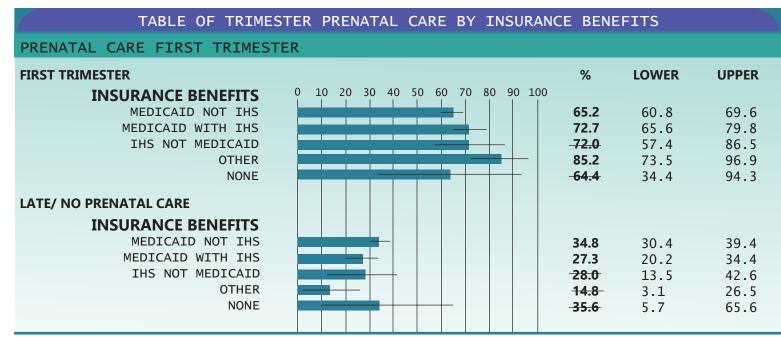
This table shows when Navajo women began prenatal care by marital status. According to the table, the greatest percentage of married Navajo women began prenatal care during their first trimester. Fewer unmarried Navajo women began prenatal care during their first trimester. This data shows a statistically significant association between marital status and prenatal care during the first trimester of pregnancy. A greater percentage of unmarried Navajo women either began their prenatal care after the first trimester or received no prenatal care. Fewer married Navajo women either began their prenatal care after the first trimester or received no prenatal care. This data shows a statistically significant association between marital status and prenatal care after the first trimester of pregnancy.



This table shows when Navajo women began prenatal care by area of residence. This data does not show a statistical association between area of residence and prenatal care during or after the first trimester of pregnancy.



This table shows when Navajo women began prenatal care by Federal Poverty Level (FPL). According to the table, the greatest percentage of Navajo women that earned more than 185% of the FPL began prenatal care during the first trimester. Fewer Navajo women that earned less than 100% of the FPL began prenatal care during the first trimester. This data shows a statistically significant association between FPL and prenatal care during the first trimester of pregnancy. A greater percentage of Navajo women that earned less than 100% of the FPL either began their prenatal care after the first trimester or received no prenatal care. Fewer Navajo women that earned more than 185% of the FPL either began their prenatal care after the first trimester or received no prenatal care. This data shows a statistically significant association between FPL and prenatal care during the first trimester of pregnancy.



*Some data instability may be represented in the table above.

This table shows when Navajo women began prenatal care by payer of care. According to the table, the greatest percentage of Navajo women with other payer of care services began their prenatal care during the first trimester. Fewer Navajo women with no payer of care began prenatal care during the first trimester.

This data does not show a statistical association between payer of care and prenatal care during the first trimester of pregnancy.

A slightly larger percentage of Navajo women with no payer of care either began their prenatal care after the first trimester or received no prenatal care. Fewer Navajo women with other payer of care services either began their prenatal care after the first trimester or received no prenatal care. This data does not show a statistical association between payer of care and prenatal care after the first trimester of pregnancy.

WIC PARTICIPATION							
PRENATAL CARE FIRST TRIMESTER							
0	10 20 30 40 50 60 70 80 90 100	%	LOWER	UPPER			
YES NO		67.5 66.0	63.0 60.2	72.0 71.9			

This table shows when Navajo women began prenatal care by WIC service during pregnancy. According to the table, a slightly larger percentage of Navajo women that received WIC service were more likely to begin prenatal care in the first trimester. This data does now show a statistical association between WIC service and prenatal care during the first trimester of pregnancy.

FLU SHOT 12 MONTHS BEFORE DELIVERY

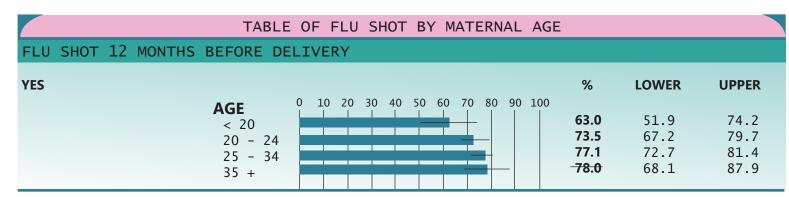
According to the Centers for Disease Control and Prevention the flu is a contagious respiratory illness. The flu infects the upper (nose and throat) and lower (lungs) respiratory tracts. The flu ranges from mild to severe and may cause death. Annual vaccination can prevent and reduce the burden of the flu associated with death and hospitalization (CDC, 2020). Pregnant women are at high risk as they are prone to severe illness; therefore, a flu shot is recommended before delivery. If pregnant women do not receive an annual flu shot, they are at risk of several adverse effects leading to hospitalization. High fevers associated with flu can lead to neural tube defects to the baby. A flu shot will help protect the baby as antibodies pass from the mother to their child and protects the baby from the flu after birth.

Sources:

CDC. Flu Vaccine Safety and pregnancy. 8 Sept. 2020, www.cdc.gov/flu/highrisk/qa_vacpregnant.htm

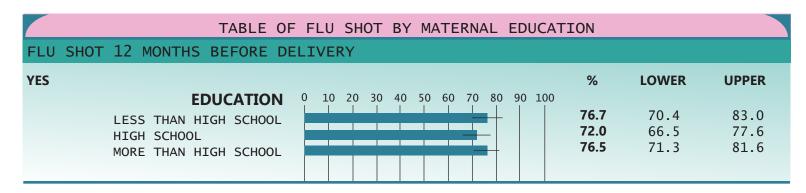
The graphs below show the following about the New Mexico Navajo mothers in this report:

- Women who were less than 20 years of age were less likely to receive a flu shot 12 months before delivery compared to those who were older.
- There was no difference among high school education levels for women who received a flu shot 12 months before delivery.
- There was a slightly lower proportion of women who were not married, compared to those who were married, that would receive a flu shot 12 months before delivery.
- There was a slight difference in proportion of women living in McKinley or San Juan counties who may have received a flu shot 12 months before delivery compared to more women living in Other New Mexico counties.
- Women who made less than 185% of the Federal Poverty Level were less likely to receive a flu shot 12 months before delivery compared to those who had higher household incomes.
- Women with Medicaid only as their payer of care were less likely to receive a flu shot 12 months before delivery compared to those with Medicaid and Indian Health Services.
- Women who did not receive any WIC services during pregnancy were less likely to receive a flu shot 12 months before delivery compared to those who received WIC services.

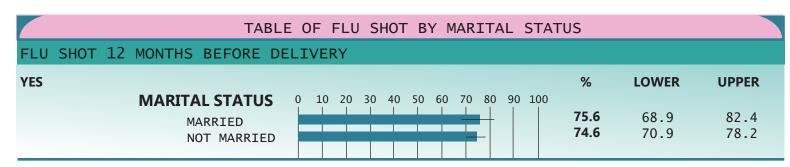


This table shows flu shots 12 months before delivery by maternal age. According to the table, a slightly larger percentage of Navajo women older than 35 years of age received flu shots 12 months before delivery.

This data does not show a statistical association between maternal age and flu shot uptake before delivery.



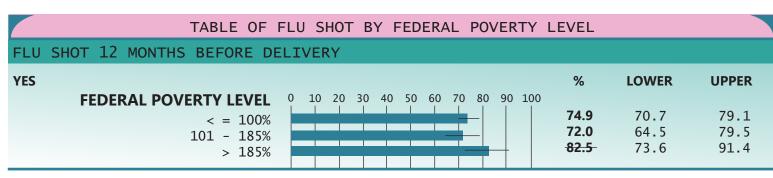
This table shows flu shots 12 months before delivery by maternal education level. This data does not show a statistical association between maternal education level and flu shot uptake before delivery.



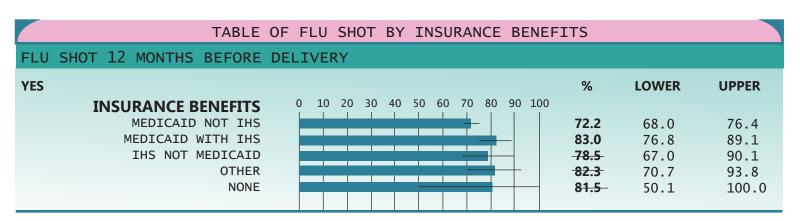
This table shows flu shots 12 months before delivery by marital status. According to the table, a slightly larger percentage of married Navajo women received flu shots 12 months before delivery compared to unmarried Navajo women. This data does not show a statistical association between marital status and flu shot uptake before delivery.

TABLE OF FLU SHOT BY RESIDENCE	E		
FLU SHOT 12 MONTHS BEFORE DELIVERY			
YES	%	LOWER	UPPER
MCKINLEY/ SAN JUAN COUNTY OTHER NM COUNTIES	74.5 75.5	70.7 69.3	78.3 81.7

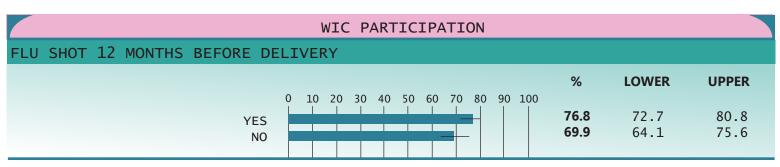
This table shows flu shots 12 months before delivery by area of residence. According to the table, a slightly larger percentage of Navajo women residing in other NM counties received flu shots 12 months before delivery. This data does not show a statistical association between area of residence and flu shot uptake before delivery.



This table shows flu shots 12 months before delivery by Federal Poverty Level (FPL). According to the table, the greatest percentage of Navajo women that earned more than 185% of the FPL were more likely to receive flu shots 12 months before delivery. This data does not show a statistical association between FPL and flu shot uptake before delivery.



This table shows flu shots 12 months before delivery by payer of care. According to the table, a slightly larger percentage of Navajo women with Medicaid and Indian Health Services as payer of care received flu shots 12 months before delivery. Fewer Navajo women with Medicaid but not Indian Health Services as payer of care were less likely to receive flu shots 12 months before delivery. This data does not show a statistical association between payer of care and flu shots uptake before delivery.



This table shows flu shots before delivery by WIC service. According to the table, a greater percentage of Navajo women with WIC service reported receiving a flu shot 12 months before delivery. This data does not show a statistical association between WIC service and flu shot uptake before delivery.

ORAL HEALTH DURING PREGNANCY

Oral health is especially important during pregnancy. During pregnancy, women are prone to gingivitis, periodontal diseases, loose teeth, tooth erosion, and dental cavities (March of Dimes, 2019; CDC, 2020). It is important to safeguard the health of mother and the child by practicing good oral hygiene (brush, floss, regular dental visits). Poor oral health hygiene impacts children as cavity causing bacteria can be passed from mother to baby (CDC, 2020). Poor health hygiene can result in preterm births and babies born with low birth weights (CDC, 2020). Children of mothers with untreated cavities are three times more likely to have cavities in childhood; and if untreated, children miss more school due to dental pain (CDC, 2020). These adverse outcomes are public health concerns as they can have long term effects on both mother and child. Studies show that periodontal disease is connected to diabetes, heart disease, obesity, and pneumonia (ADA, 2019).

Disparities in overall oral health outcomes have been reported among American Indians and Alaska Natives, which is important as Navajo women may be at high risk of poor oral health outcomes (CDC, 2020).

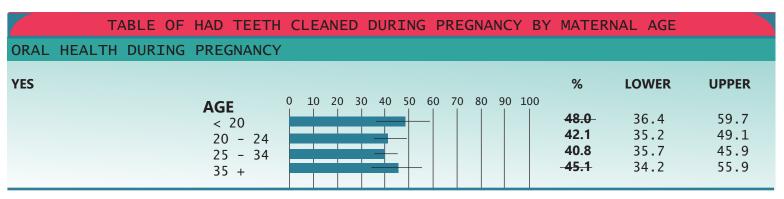
Sources:

ADA Science & Research Institute, LLC. (2019, September 23). Oral-Systemic Health. Retrieved from https://www.ada.org/en/member-center/oral-health-topics/oral-systemic-health CDC. (2020, May 01). Disparities in Oral Health. Retrieved from https://www.cdc.gov/oralhealth/oral_health_disparities/index.htm

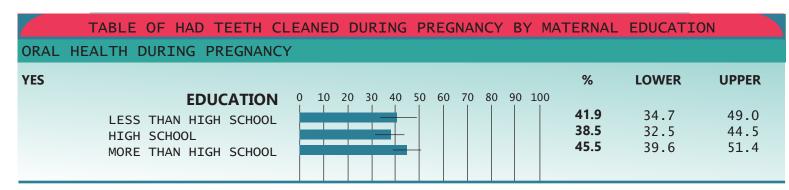
March of Dimes. "Dental Health during Pregnancy." Dental Health During Pregnancy, June 2019, www.marchofdimes.org/pregnancy/dental-health-during-pregnancy.aspx

Higher proportions of prenatal oral health services were obtained by those who:

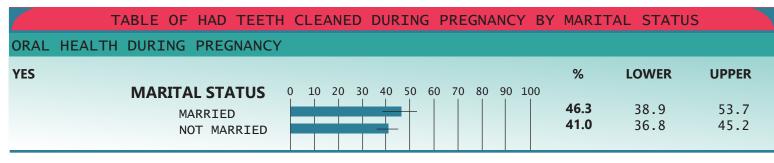
- were under 20 years of age.
- had achieved more than a high school education.
- were married.
- had household incomes greater than 185% of the Federal Poverty Level.
- had Medicaid and Indian Health Services as payers of care.
- received WIC benefits.



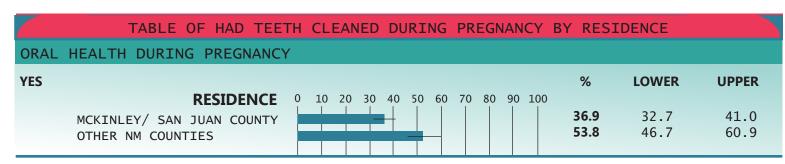
This table shows oral health services during pregnancy by maternal age. According to the table the greatest percentage of Navajo women less than 20 years of age received oral health services during pregnancy. This data does not show a statistical association between maternal age and oral health care.



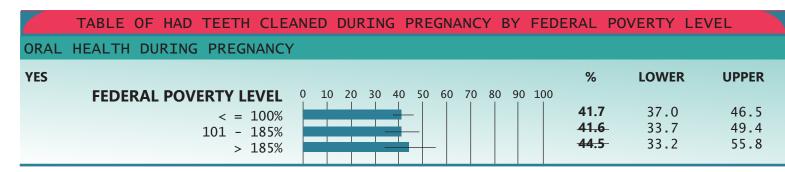
This table shows oral health services during pregnancy by maternal education. According to the table, the greatest percentage of Navajo women with more than a high school education level were more likely to receive oral health services during pregnancy. This data does not show a statistical association between maternal education and oral health care.



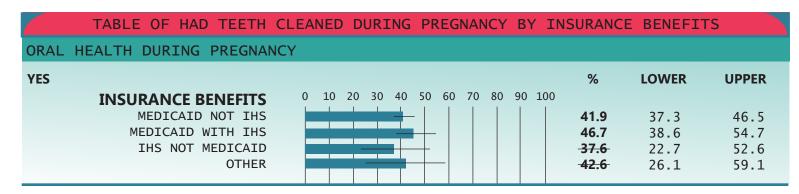
This table shows oral health services during pregnancy by marital status. According to the table, the greatest percentage of married Navajo women were more likely to receive oral health services during pregnancy. This data does not show a statistical association between marital status and oral health care.



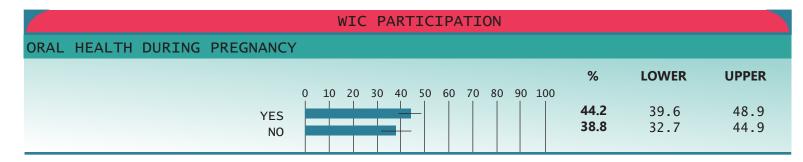
This table shows oral health services during pregnancy by area of residence. According to the table, the greatest percentage of Navajo women residing in other NM counties received oral health services during pregnancy. This data shows a statistically significant association between area of residence and oral health care.



This table shows oral health services during pregnancy by Federal Poverty Level (FPL). According to the table, the greatest percentage of Navajo women that earned more than 185% of the FPL were more likely to receive oral health services during pregnancy.



This table shows oral health services during pregnancy by payer of care. According to the table, the greatest percentage of Navajo women with Medicaid and Indian Health Services as their payer of care were more likely to receive oral health services during pregnancy. This data does not show a statistical association between payer of care and oral health care.



This table shows oral health services during pregnancy by WIC service during pregnancy. According to the table, the greatest percentage of Navajo women with WIC services during their pregnancy received oral health services. This data does not show a statistical association between WIC service and oral health care.

GESTATIONAL DIABETES

Gestational diabetes is diagnosed during pregnancy and causes high blood sugar that affects both the mother and baby's health (Mayo Clinic, 2020). The adverse effects associated with gestational diabetes is a public health concern. The effects on the mother include high blood pressure and preeclampsia, the need for a c-section, and future diabetes. Effects on the baby include excessive birth weight, preterm births, serious breathing difficulties, low blood sugar, stillbirth, and obesity and diabetes later in life (Mayo Clinic, 2020). Ten percent of pregnancies are affected by gestational diabetes, and recently cases of gestational diabetes has increased by 56% (CDC, 2018). There is a major public health concern for the Navajo population as there are more diagnoses of gestational diabetes in American Indian/Alaska Native women (12.8%) (Hiratsuka et al., 2022).

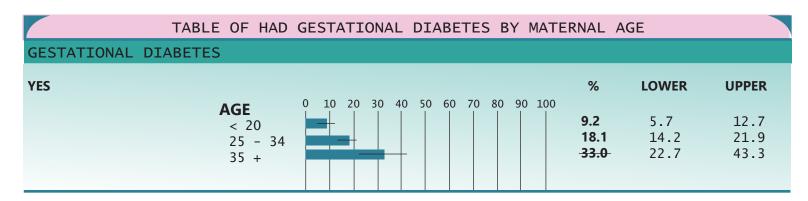
Sources:

Center for Disease Control and Prevention. (2018, June 12). Diabetes During Pregnancy. Retrieved from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/diabetes-during-pregnancy.htm Hiratsuka, V. Y., Reid, M., Chang, J., Jiang, L., Brega, A. G., Fyfe-Johnson, A. L., Huyser, K. R., Johnson-Jennings, M., Conway, C. J. F., Rockell, J., Dillard, D. A., Moore, K., Manson, S. M., & O'Connell, J. (2022). Associations Between Rurality, Pre-pregnancy Health Status, and Macrosomia in American Indian/Alaska Native Populations. Maternal and Child Health Journal, 26(12), 2454. https://doi.org/10.1007/s10995-022-03536-w

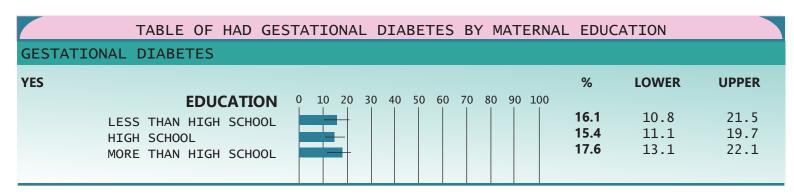
Mayo Clinic. (2020, August 26). Gestational diabetes. Retrieved from https://www.mayoclinic.org/diseases-conditions/gestational-diabetes/symptoms-causes

Women with the highest prevalence of diabetes included:

- those over 35 years of age;
- those with higher education levels,
- those who were married,
- those living outside San Juan or McKinley Counties,
- those with higher income levels,
- those with Indian Health Services only,
- and those who did not receive any WIC service during pregnancy.



This table shows Navajo women that had gestational diabetes during pregnancy by maternal age. According to the table, the greatest percentage of Navajo women older than 35 years of age had gestational diabetes during pregnancy. This data shows a statistically significant association between maternal age and gestational diabetes.



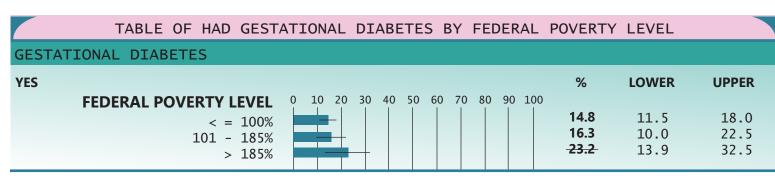
This table shows Navajo women that had gestational diabetes during pregnancy by maternal education. According to the table, a slightly larger percentage of Navajo women with more than a high school education had gestational diabetes during pregnancy. This data does not show a statistical association between maternal education and gestational diabetes.

TABLE OF HAD	GESTATIONAL DIABETES BY MARI	TAL S	TATUS	
GESTATIONAL DIABETES				
YES		%	LOWER	UPPER
MARRIED	0 10 20 30 40 50 60 70 80 90 100	19.8 15.3	14.1 12.3	25.6 18.4
NOT MARRIED		13.3	12.5	10.7

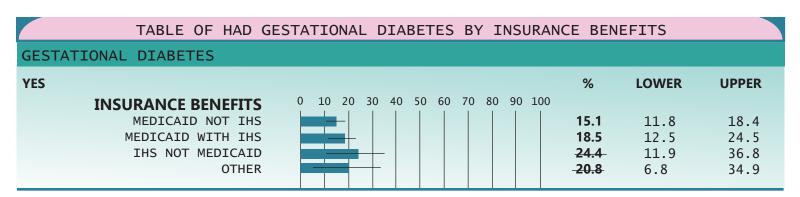
This table shows Navajo women that had gestational diabetes during pregnancy by marital status. According to the table, the greatest percentage of married Navajo women had gestational diabetes during pregnancy. This data does not show a statistical association between marital status and gestational diabetes.

TABLE OF HAD	GESTATIONAL D	IABETES BY RE	SIDENCE		
GESTATIONAL DIABETES					
YES RESIDENCE	0 10 20 30 40 50	60 70 80 90 100	%	LOWER	UPPER
MCKINLEY/ SAN JUAN COUNTY OTHER NM COUNTIES			15.4 18.6	12.4 13.1	18.4 24.0

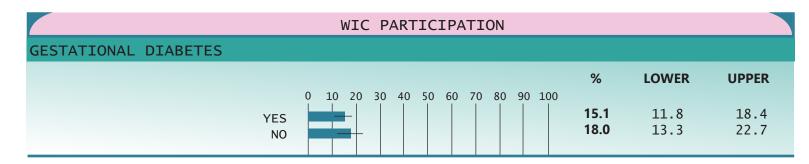
This table shows Navajo women that had gestational diabetes during pregnancy by area of residence. According to the table, the greatest percentage of Navajo women residing in other NM counties were diagnosed with gestational diabetes during pregnancy. This data does not show a statistical association between area of residence and gestational diabetes.



This table shows Navajo women that had gestational diabetes during pregnancy by Federal PovertyLevel (FPL). According to the table, the greatest percentage of Navajo women that earned more than 185% of the FPL were more likely to be diagnosed with gestational diabetes. This data does not show a statistical association between FPL and gestational diabetes.



This table shows Navajo women that had gestational diabetes during pregnancy by payer of care. According to the table, the greatest percentage of Navajo women with Indian Health Services but not Medicaid as payer of care were diagnosed with gestational diabetes during pregnancy. This data does not show a statistical association between payer of care and gestational diabetes.



This table shows Navajo women that reported gestational diabetes according to WIC service during their pregnancy. According to the table, a greater percentage of Navajo women without WIC service were diagnosed with gestational diabetes during pregnancy. This data does not show a statistical association between WIC service and gestational diabetes.

BABY'S STAY IN HOSPITAL

The length of hospital stay following delivery is determined by a few factors including the type of delivery and the specialized needs of the infant. Specialized care and a lengthier hospital stay are typically required for babies that are born preterm (before 37 weeks) or late term (after 42 weeks), babies born at a low birth weight (less than 5.5 pounds), multiple births (that can result in lower birth weights), medicine or resuscitation in the delivery room, specialized treatment (e.g. blood transfusion), or health conditions such as seizures, breathing troubles, heart problems, infections, or birth defects (Stanford, 2021). The baby's length of stay, and the mother's, is based on the unique characteristics of each mother-baby dyad, hence medical practitioners make decisions based on but not limited to the aforementioned factors (Benitz, 2015). Typically, the length of stay is up to 48 hours for a vaginal birth (Nicholson, 2018).

Sources:

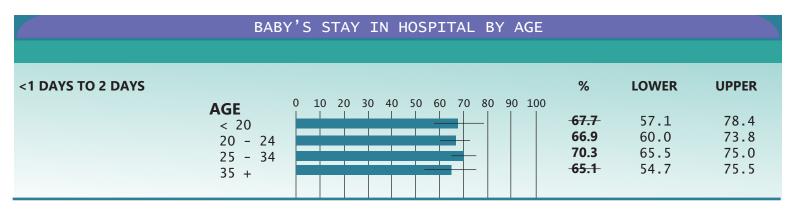
Benitz, W.E., & Newborn, C.O. (2015, May 01). Hospital Stay for Healthy Term Newborn Infants. Retrieved from https://pediatrics.aappublications.org/content/135/5/948

Nicholson, H. (2018, April 23). Maternity Length of Stay Rules. Retrieved from https://www.ncsl.org/research/health/final-maternity-length-of-stay-rules-published.aspx

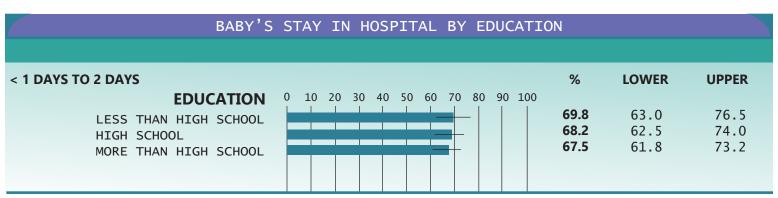
Stanford Children's Health. (2021). The Neonatal Intensive Care Unit (NICU). Retrieved from https://www.stanfordchildrens.org/en/topic/default?id=the=neonatal-intensive-care-unit-nicu-90-P02389

Infant hospitalization for less than one day was experienced among:

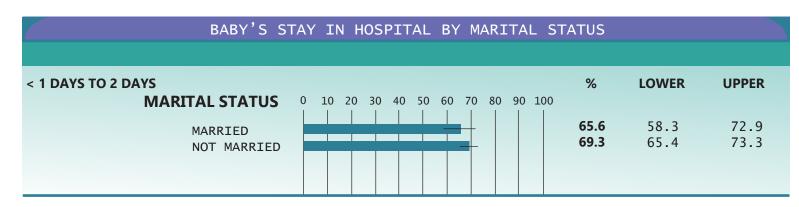
- women aged 25-34,
- women with less than a high school education,
- women that were not married,
- women living in McKinley or San Juan Counties,
- women with lower household incomes,
- women without insurance,
- and women without any WIC service during pregnancy.



This table shows how many days a newborn Navajo baby stayed in the hospital by maternal age. According to the table, the majority of Navajo babies born to Navajo women between the ages of 25 and 34 stayed less than 1 to 2 days at the hospital. This data does not show a statistical association between maternal age and the length of baby's hospital stay.



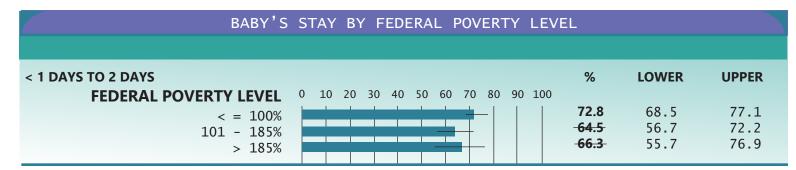
This table shows how many days a newborn Navajo baby stayed in the hospital by maternal education. According to the table, a slightly larger percentage of Navajo babies born to Navajo women with less than a high school education stayed less than 1 to 2 days at the hospital. This data does not show a statistical association between maternal education and the length of the baby's hospital stay.



This table shows how many days a newborn Navajo baby stayed in the hospital by marital status. According to the table, the majority of Navajo babies born to unmarried Navajo women stayed less than 1 to 2 days at the hospital. This data does not show a statistical association between marital status and the length of the baby's hospital stay.

	BABY'S STAY BY RESIDENCE			
AVERAGE OVERNIGHT STAY RESIDENCE	0 10 20 30 40 50 60 70 80 90 100	%	LOWER	UPPER
MCKINLEY/ SAN JUAN COUNTY OTHER NM COUNTIES		72.8 59.1	69.0 52.0	76.7 66.2

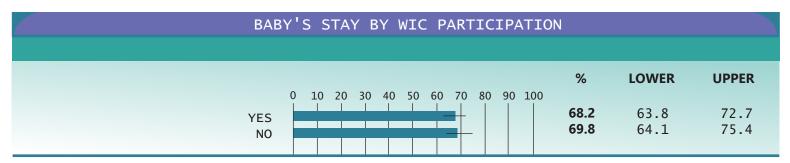
This table shows how many days a newborn Navajo baby stayed in the hospital by maternal area of residence. According to the table, the majority of Navajo babies born to Navajo women residing in McKinley/San Juan counties stayed less than 1 to 2 days at the hospital. This data shows a statistically significant association between maternal area of residence and the length of the baby's hospital stay.



This table shows how many days a newborn Navajo baby stayed in the hospital by Federal Poverty Level (FPL). According to the table, the majority of Navajo babies born to Navajo women that earned less than <100% of the FPL stayed less than 1 to 2 days at the hospital. This data does not show a statistical association between FPL and the length of the baby's hospital stay.



This table shows how many days a newborn Navajo baby stayed in the hospital by payer of prenatal care. According to the table, the majority of Navajo babies born to Navajo women that did not have a payer of prenatal care stayed less than 1 to 2 days at the hospital. This data does not show a statistical association between payer of prenatal care and the length of the baby's hospital stay.



This table shows how many days a newborn Navajo baby stayed in the hospital by maternal WIC service. According to the table, slightly more Navajo babies born to Navajo women who did not receive WIC service during pregnancy stayed less than 1 to 2 days at the hospital. This data does not show a statistical association between maternal WIC service and the length of the baby's hospital stay.

BREASTFEEDING DURATION

According to the Centers for Disease Control and Prevention, breastfeeding is a long term health investment for both mother and infant. Benefits to the mother include lower risks of high blood pressure, type 2 diabetes, ovarian, and breast cancers. Benefits to the infant include reduced risks of asthma, obesity, type 1 diabetes, severe lower respiratory disease, ear infections, sudden infant death syndrome, gastrointestinal infections, and necrotizing enterocolitis in preterm infants

Improving the duration of breastfeeding is a public health concern. According to the Navajo Maternal Child Needs Assessment, the challenge for new mothers is limited family and workplace support. Navajo mothers, as many mothers in the United States, stop breastfeeding sooner than they planned, which can affect the long term health benefits of both the mother and their infant. Disparities exist in breastfeeding with African American women and American Indian/ Alaska Native women as they have the lowest percentage of breastfeeding compared to other races (Jones, 2015).

Sources:

Centers for Disease Control and Prevention. (2020, May 28). About Breastfeeding. Retrieved from https://www.cdc.gov/breastfeeding/about-breastfeeding/index.html Jones, K.M., Power, M.L., Queenan, J.T., & Schulkin, J. (2015, May). Racial and ethnic disparities in breastfeeding. Retrieved from https://https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4410446

Navajo Maternal Child Needs Assessment Working Group. (2020). 2020 Navajo Nation Maternal and Child Health Needs Assessment. Retrieved from https://www.nec.navajo-nsn.gov/

Prevalence of breastfeeding beyond two months was highest among:

- those who were over 35 years of age,
- those with more than a high school education,
- those who were married,
- those who lived in McKinley or San Juan Counties,
- those with high household incomes,
- those who had other sources as payer of care,
- those who did not receive any WIC service during their postnatal period.



This table shows breastfeeding by Navajo mothers for more than two months by maternal age. According to the table, there was a greater percentage of Navajo mothers over the age of 35 that breastfed for more than two months. This data shows a statistically significant association between maternal age and breastfeeding.



This table shows breastfeeding by Navajo mothers for more than two months by maternal education. According to the table, a greater percentage of Navajo mothers with more than a high school education breastfed for more than two months. This data shows a statistically significant association between maternal education and breastfeeding.



This table shows breastfeeding by Navajo mothers for more than two months by marital status. According to the table, there was a greater percentage of married Navajo mothers that breastfed for more than two months. This data does not show a statistical association between marital status and breastfeeding.



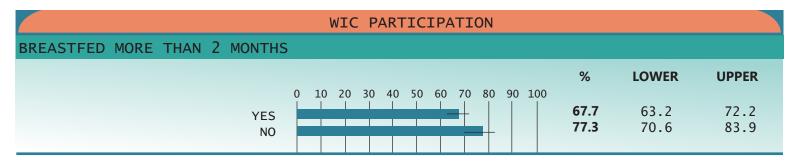
This table shows breastfeeding by Navajo mothers for more than two months by area of residence. According to the table, there was a greater percentage of Navajo mothers residing in McKinley/San Juan counties that breastfed for more than two months. This data does not show a statistical association between area of residence and breastfeeding.



This table shows breastfeeding by Navajo mothers for more than two months by Federal Poverty Level (FPL). According to the table, a greater percentage of Navajo mothers that earned more than 185% of the FPL breastfed for more than two months. This data shows a statistically significant association between FPL and breastfeeding.



This table shows breastfeeding by Navajo mothers for more than two months by payer of care. According to the table, a greater percentage of Navajo mothers with other payers of care breastfed for more than two months. This data does not show a statistical association between payer of care and breastfeeding.



This table shows breastfeeding by Navajo mothers for more than two months according to WIC service during the postnatal period. According to the table, a greater percentage of Navajo mothers without WIC services reported breastfeeding for more than 2 months during their postnatal period. This data shows a statistically significant association between WIC service in the postnatal period and breastfeeding.

INFANT SLEEPS ON BACK

Sudden Infant Death Syndrome or SIDS is the unexpected death of infants under the age of one year. Sudden unexpected infant death is a sudden and unexpected death of a baby aged younger than 1 year. For these deaths, there is no obvious cause before investigation. Sudden unexpected infant deaths often happen during sleep or in the baby's sleep area. The Mayo Clinic reported the cause of SIDS might be associated with defects in portions of the brain that control breathing and arousal from sleep. The Centers for Disease Control and Prevention (CDC) reported 1,300 deaths in the United States due to SIDS in 2018. CDC reported an increased risk of SIDS when babies are placed on their stomachs to sleep. It is recommended that babies be placed on their backs to sleep to reduce SIDS relating to sleep. CDC and the National Institute of Health launched a public health safe sleep campaign to reduce instances of infant mortality from SIDS. It is important to note that SIDS disproportionality affects infants of color.

Despite increases in Navajo mothers placing their infants to sleep on their backs, American Indian and Alaska Natives have high rates of SIDS that other ethnicities (CDC, 2020; Navajo Maternal Child Needs Assessment Working Group, 2020).

Sources:

Centers for Disease Control and Prevention. (n.d.). About suid and sids. Centers for Disease Control and Prevention. https://www.cdc.gov/sudden-infant-death/about/index.html $\#:\sim:text=Sudden\%20unexpected\%20infant\%20death\%20is,the\%20problem\%20and\%20CDC\%20activities$

Centers for Disease Control and Prevention. (2020, December 31). Sudden Unexpected Infant Death and Sudden Infant Death Syndrome. Retrieved from

https://www.cdc.gov/sids/index.htm

Centers for Disease Control and Prevention. (2020, November 10). Data and Statistics for SIDS and SUID.

Retrieved from https://www.cdc.gov/sids/data.htm

Mayo Clinic. (2020, May 20). Sudden Infant Death Syndrome (SIDS). Retrieved from https://www.mayoclinic.org/diseases-conditions/sudden-infant-death-syndrome/symptoms-causes

National Institute of Health. (2020). Research on Back Sleeping and SIDS. Retrieved from

https://safetosleep.nichd.nih.gov/research/science/backsleeping

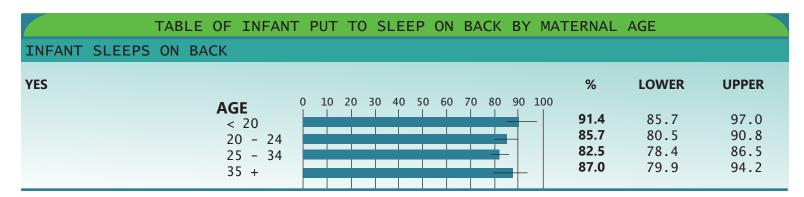
Navajo Maternal Child Needs Assessment Working Group. (2020). 2020 Navajo Nation Maternal and Child Health

Needs Assessment. Retrieved from https://www.nec.navajo-nsn.gov/Portals/0/Home

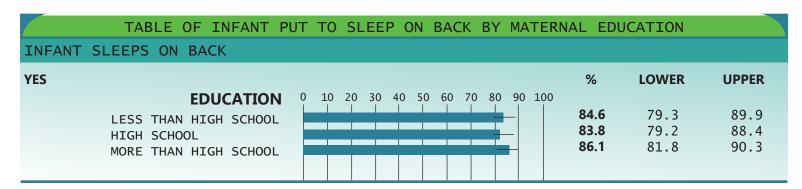
Webpage/MaternalChildHEalth_V7_HiRez_Sept_30_20.pdf

Higher proportions of supine/back to sleep placement were reported for:

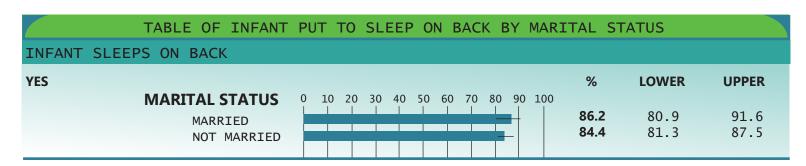
- women who were under 20 years of age,
- women who had more than a high school education,
- women who were married,
- women that lived in McKinley or San Juan Counties,
- women with high household incomes,
- women that used Indian Health Services only,
- women who did not receive WIC service in their postnatal period.



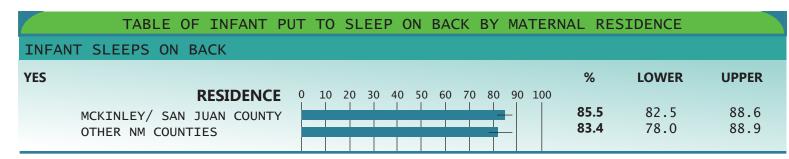
This table shows Navajo mothers that placed their babies to sleep on their backs by maternal age. According to the table, a greater percentage of Navajo mothers twenty years of age and younger placed their babies to sleep on their back. This data does not show a statistical association between maternal age and infant sleeping position.



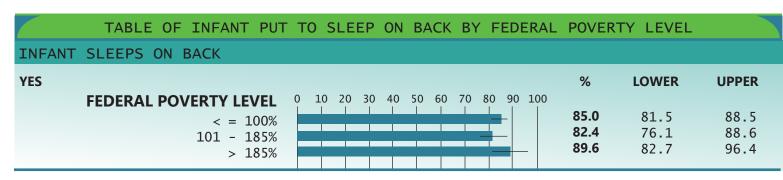
This table shows Navajo mothers that placed their babies to sleep on their backs by maternal education. According to the table, a greater percentage of Navajo mothers with more than a high school education placed their babies to sleep on their back. This data does not show a a statistical association between maternal education and infant sleeping position.



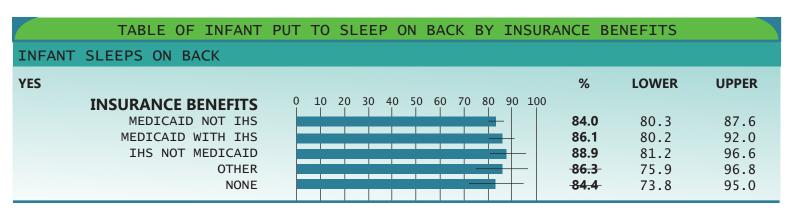
This table shows Navajo mothers that placed their babies to sleep on their backs by marital status. According to the table, a greater percentage of married Navajo mothers placed their babies to sleep on their back. The data does not show a statistical association between marital status and infant sleeping position.



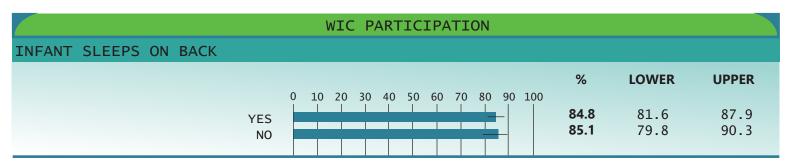
This table shows Navajo mothers that placed their babies to sleep on their backs by area of residence. According to the table, a greater percentage of Navajo mothers residing in McKinley/San Juan counties placed their babies to sleep on their back. This data does not show a statistical association between area of residence and infant sleeping position.



This table show Navajo mothers that placed their babies to sleep on thier backs by Federal poverty Level (FPL). According to the table, a greater percentage of Navajo mothers that earned more than 185% of the FPL placed their babies to sleep on their back. This data does not show a statistical association between FPL and infant sleeping position.



This table shows Navajo mothers that place their babies to sleep on their backs by payer of care. According to the table, a greater percentage of Navajo mothers with Indian Health Services but not Medicaid as payer of care placed their babies to sleep on their back. This data does not show a statistical association between payer of care and infant sleeping position.



This table shows Navajo mothers that placed their babies to sleep on their back by WIC service during the postnatal period. According to the table, a slightly larger percentage of Navajo mothers without WIC services during the postnatal period placed their babies to sleep on their back. This data does not show a statistical association between WIC service during the postnatal period and infant sleeping position.

POSTPARTUM CONTRACEPTION

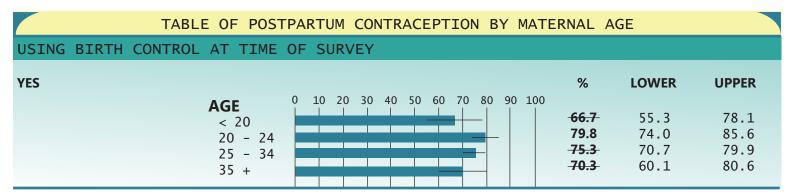
Contraception allows women to decide when and if they want to have children. In the postpartum period, women can become pregnant as early as 3 weeks after delivery even if the mother is breastfeeding and has not yet had her period. Knowing how early a woman can become pregnant in the postpartum period is important as women can plan on contraception use. In public health, family planning is important as there are health and economic implications to birth spacing for unplanned births. Unintended births have been linked to babies born preterm, babies born with low birth weights, and/or babies born with birth defects (ODPHP, 2020). Unintended pregnancies can be linked to delays in prenatal care, reduced likelihood of breastfeeding, increased risk of maternal depression, and increased risk of intimate partner violence during pregnancy (ODPHP, 2020). Postpartum contraception is a public health concern which is important for women to be educated on how to use contraception and access contraception. Women of color experience lower rates of postpartum contraception usage when compared with other ethnicities/races. Younger women under the age of 20 have lower rates of postpartum contraception use when compared to older women of childbearing age (ODPHP, 2020).

Sources:

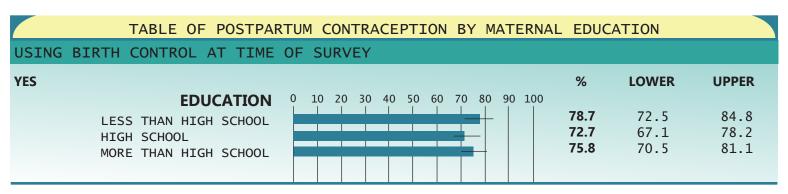
Office of Disease Prevention and Health Promotion. (2020). Family Planning. Retrieved from https://health.gov/healthypeople/objectives-and-data/browse-objectives/family-planning

Postpartum contraceptive use was highest among those

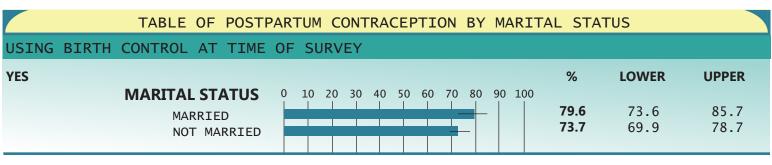
- between the ages of 20 and 24.
- who had less than a high school education.
- who were married.
- who lived in McKinley or San Juan counties.
- whose household income was between 101 and 185% of the Federal Poverty Level.
- who reported 'other' as a form of insurance.
- who had WIC services in the postnatal period (slight difference than those without).



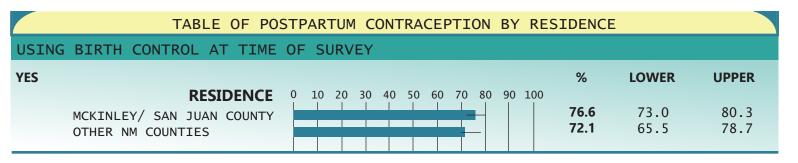
This table shows Navajo women's postpartum contraception use by maternal age. According to the table, there was a greater percentage of Navajo women aged 20-24 that used contraception in their postpartum period. This data does not show a statistical association between maternal age and postpartum contraception.



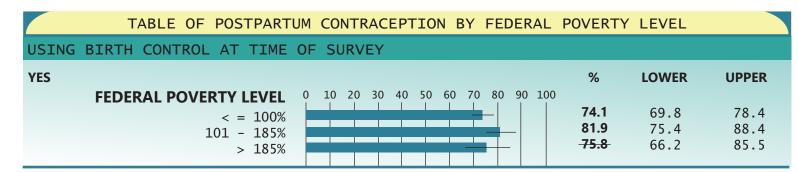
This table shows Navajo women's postpartum contraception use by maternal education. According to the table, there was a greater percentage of Navajo women with less than a high school education that used contraception in their postpartum period. This data does not show a statistical association between maternal education and postpartum contraception.



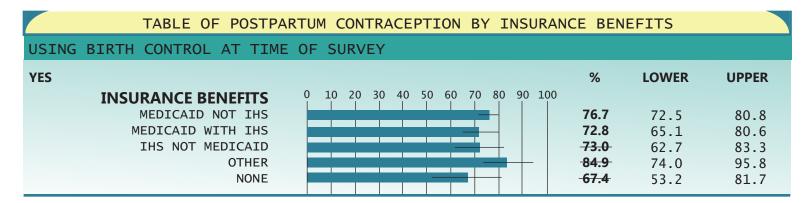
This table shows Navajo women's postpartum contraception use by marital status. According to the table, there was a greater percentage of married Navajo women that used contraception in their postpartum period. This data does not show a statistical association between marital status and postpartum contraception.



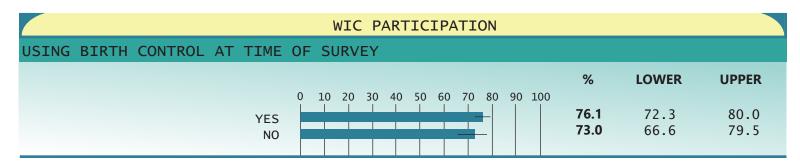
This table shows Navajo women's postpartum contraception use by area of residence. According to the table, there was a greater percentage of Navajo women residing in McKinley/San Juan counties that used contraception in their postpartum period. This data does not show a statistical association between area of residence and postpartum contraception.



This table shows Navajo women's postpartum contraception use by Federal Poverty Level (FPL). According to the table, a greater percentage of Navajo women that earned between 101-185% of the FPL used contraception in their postpartum period. This data does not show a statistical association between FPL and postpartum contraception.



This table shows Navajo women's postpartum contraception use by payer of care. According to the table, there was a greater percentage of Navajo women with other payer of care benefits that used contraception in their postpartum period. This data does not show a statistical association between payer of care and postpartum contraception.



This table shows Navajo women's postpartum contraception use by WIC service during the postnatal period. According to the table, a greater percentage of Navajo women with WIC services used contraception in their postpartum period. This data does not show a statistical association between WIC service during the postnatal period and postpartum contraception.

POSTPARTUM CHECKUP

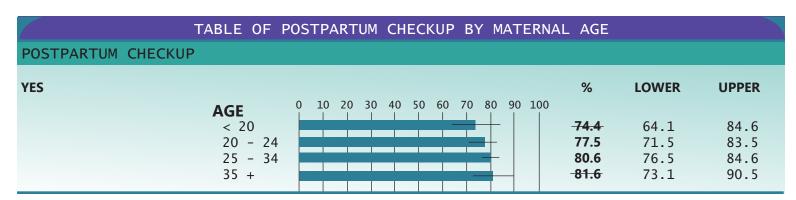
Postpartum checkups are important in the healthcare of recently pregnant women. Checkups allow healthcare providers to determine if there are any health complications related to recent pregnancy. Postpartum health complications can be serious and life threatening. It is important that mothers know the warning signs, receive accurate and timely diagnosis and quality care (CDC, 2020). Postpartum checkups are important for public health because two out of three pregnancy-related deaths are preventable, and the leading cause of death are heart conditions and stroke (March of Dimes, 2018). American Indian/Alaska Natives are two to three times more likely to die of pregnancy-related causes compared to White women (CDC, 2020).

Sources:

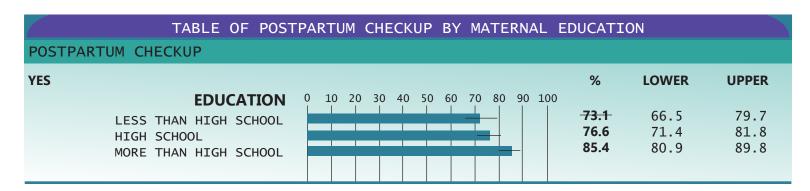
Centers for Disease Control and Prevention. (2020, August 04). Pregnancy-Related Deaths in the United States. Retrieved from https://www.cdc.gov/hearher/pregnancy-related-deaths/index.html March of Dimes. (2018, July). Your postpartum checkups. Retrieved from https://www.marchofdimes.org/pregnancy/postpartum-care.aspx

Having a postpartum checkup was higher among those

- Who were over 35 years of age
- with higher education levels
- who were married
- who lived outside San Juan or McKinley Counties
- whose household income was greater than 185% of the Federal Poverty Level
- Used Medicaid and Indian Health Services as forms of insurance
- Participated in WIC



This table shows Navajo women's postpartum checkup by maternal age. According to the table, there was a slightly larger percentage of Navajo women over the age of 35 that had a postpartum checkup. This data does not show a statistical association between maternal age and postpartum checkup.



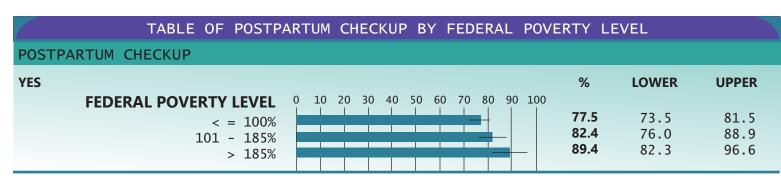
This table shows Navajo women's postpartum checkup by maternal education. According to the table, there was a greater percentage of Navajo women with more than a high school education that had a postpartum checkup. This data shows a statistically significant association between maternal education and postpartum checkup.

	TABLE OF PO	STPARTUM CHECKUP BY MARITAL	STATUS		
POSTPARTUM CI	HECKUP				
YES	MARITAL STATUS	0 10 20 30 40 50 60 70 80 90 100	%	LOWER	UPPER
	MARRIED NOT MARRIED		85.9 77.3	80.4 73.7	91.4 80.8

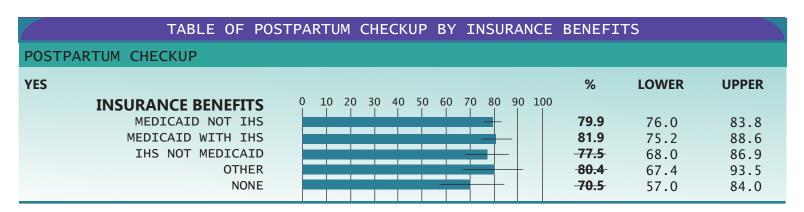
This table shows Navajo women's postpartum checkup by marital status. According to the table, there was a greater percentage of married Navajo women that had a postpartum checkup. This data shows a statistically significant association between marital status and postpartum checkup.

TABLE OF	POSTPARTUM CHECKUP BY RESIDE	NCE		
POSTPARTUM CHECKUP				
YES	0 10 20 20 40 50 50 70 00 00 100	%	LOWER	UPPER
RESIDENCE MCKINLEY/ SAN JUAN COUNTY OTHER NM COUNTIES	0 10 20 30 40 50 60 70 80 90 100	78.3 81.6	74.7 76.1	81.9 87.0

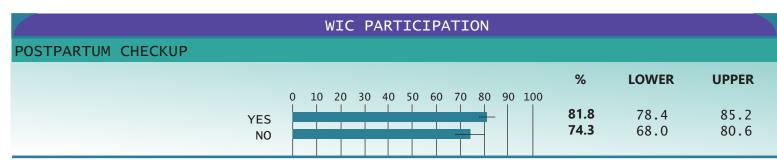
This table shows Navajo women's postpartum checkup by area of residence. According to the table, there was a greater percentage of Navajo women residing in other NM counties that had a postpartum checkup. This data does not show a statistical association between area of residence and postpartum checkup.



This table shows Navajo women's postpartum checkup by Federal Poverty Level (FPL). According to the table, there was a greater percentage of Navajo women who earned more than 185% of the FPL that had a postpartum checkup. This data shows a statistically significant association between FPL and postpartum checkup.



This table shows Navajo women's postpartum checkup by payer of care. According to the table, there was a slightly larger percentage of Navajo women with Medicaid and Indian Health Services as their payer of care that had a postpartum checkup. This data does not show a statistical association between payer of care and postpartum checkup.



This table shows Navajo women's postpartum checkup by WIC service during the postnatal period. According to the table, there was a greater percentage of Navajo women with WIC service during their postnatal period that had a postpartum checkup. This data shows a statistically significant association between WIC service during the postnatal period and postpartum checkup.

POSTPARTUM DEPRESSION

One in eight new mothers report experiencing postpartum depression (CDC, 2020). Researchers note that hormonal changes relating to pregnancy may be a possible cause of postpartum depression (OWH, 2019). Postpartum depression is a public health concern when left untreated. If untreated, depression can become chronic and children of mothers with postpartum depression are more likely to develop emotional and/or behavioral problems (Mayo Clinic, 2018). Studies show those most at risk of not receiving treatment for postpartum depression are women of color and lower socioeconomic status (CDC, 2020). Those that reported higher rates of postpartum depression were women of color with American Indian and Alaska Natives experience higher rates than other races or ethnicities (Ko et al, 2017).

Sources:

Centers for Disease Control and Prevention. (2020, May 14). Depression Among Women. Retrieved from https://www.cdc.gov/reproductivehealth/depression/index.htm

Ko, J. Y., Rockhill, K. M., Tong, V. T., Morrow, B., & Farr, S. L. (2017). Trends in Postpartum

Depressive Symptoms - 27 States, 2004, 2008, and 2012. MMWR. Morbidity and mortality weekly report, 66(6), 153–158. https://doi.org/10.15585/mmwr.mm6606a1

Mayo Clinic. (2018, September 01). Postpartum depression. Retrieved from https://www.mayoclinic.org/diseases-conditions/postpartum-depression/symptoms-causes/syc-20376617

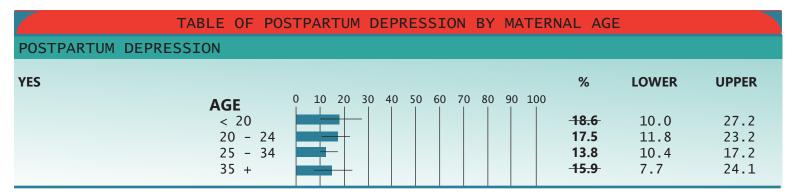
Office on Women's Health. (2019, May 14). Postpartum depression. Retrieved from https://www.womenshealth.gov/mental-health/mental-health-conditions/postpartum-depression

The graphs below show the following about the New Mexico Navajo mothers in this report:

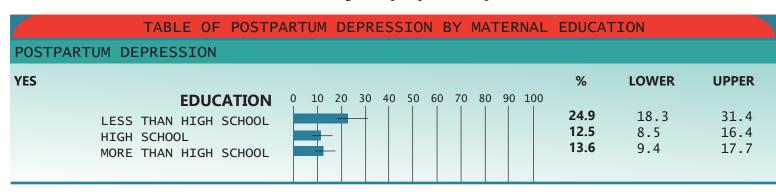
- those under 20 years experienced a higher rate of depression symptoms compared to those that were older than 20,
- those with less than a high school education were more likely to experience depression,
- and those who were not married experienced depression symptoms compared to those who were married.
- Slightly more women that had postpartum depression lived in other New Mexico counties.
- A greater proportion of women with low household incomes experienced depression.

• Postpartum Depression was higher among WIC recipients than those without WIC.

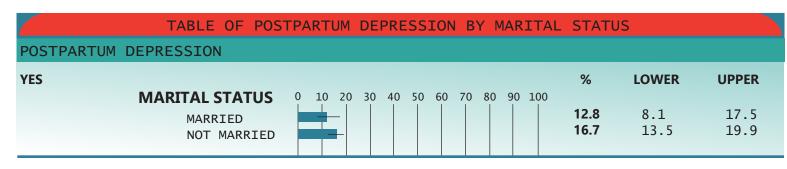
• The prevalence of postpartum depression did not vary by insurance type.



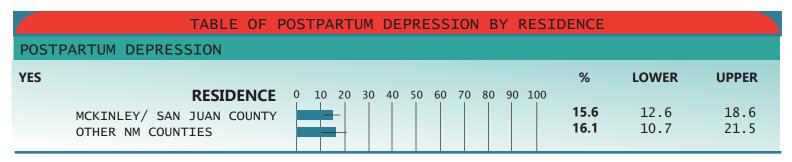
This table shows Navajo women reporting postpartum depression by maternal age. According to the table, there was a slightly larger percentage of Navajo women less than 20 years of age that reported postpartum depression. This data does not show a statistical association between maternal age and postpartum depression.



This table shows Navajo women reporting postpartum depression by maternal education. According to the table, there was a greater percentage of Navajo women with less than a high school education that had postpartum depression. This data shows a statistically significant association between maternal education and postpartum depression.



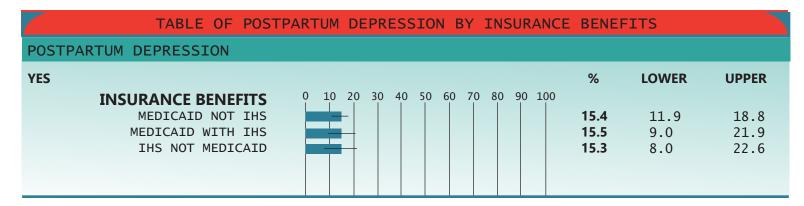
This table shows Navajo women reporting postpartum depression by marital status. According to the table, there was a greater percentage of unmarried Navajo women that reported postpartum depression. This data does not show a statistical association between marital status and postpartum depression.



This table shows Navajo women reporting postpartum depression by area of residence. According to the table, there was a slightly larger percentage of Navajo women residing in other NM counties that reported postpartum depression. This data does not show a statistical association between area of residence and postpartum depression.

TABLE OF POSTPARTUM DEPRESSION BY FEDERAL POVERTY LEVEL POSTPARTUM DEPRESSION YES **LOWER UPPER** 0 10 20 30 40 50 60 70 80 90 100 FEDERAL POVERTY LEVEL 17.4 13.7 21.0 < = 100% 13.2 18.5 8.0 101 - 185% 9.8 3.3 16.4 > 185%

This table show Navajo women reporting postpartum depression by Federal Poverty Level (FPL). According to the table, there was a greater percentage of Navajo women who earned less than 100% of the FPL that reported postpartum depression. This data does not show a statistical association between FPL and postpartum depression.



This table shows Navajo women reporting postpartum depression by payer of care. This data does not show a statistical association between payer of care and postpartum depression.

	WIC PARTICIPATION			
POSTPARTUM DEPRESSION				
	0 10 20 30 40 50 60 70 80 90 100	%	LOWER	UPPER
POSTPARTUM WIC YES NO		16.5 11.4	13.3 7.0	19.7 15.7

This table shows Navajo women reporting postpartum depression by WIC service. According to this table, there was a slightly greater percentage of Navajo women with WIC service that reported postpartum depression. This data does not show a statistical association between WIC service and postpartum depression.

PRAMS SURVEY

Please check the box next to your answer or follow the directions included with the question. You may be asked to skip some

questions that do not apply to you. **BEFORE PREGNANCY** The first questions are about you. 1. How tall are you without shoes? _ Feet _____ Inches Centimeters Just before you got pregnant with your new baby, how much did you weigh? Pounds **OR** What is your date of birth? Month Day Year The next questions are about the time before you got pregnant with your new baby. During the 3 months before you got pregnant with your new baby, did you have any of the

following health conditions? For each one, check No if you did not have the condition or Yes if you did. No Yes a. Type 1 or Type 2 diabetes (not gestational diabetes or diabetes that starts during pregnancy).. b. High blood pressure or hypertension.. c. Depression

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? ☐ I didn't take a multivitamin, prenatal vitamin, or folic acid vitamin in the month before I got pregnant ☐ 1 to 3 times a week ☐ 4 to 6 times a week ☐ Every day of the week In the 12 months before you got pregnant with your new baby, did you have any health care visits with a doctor, nurse, or other health care worker, including a dental or mental health worker? ➤ Go to Page 2, Question 9 ☐ No Yes What type of health care visit did you have in the 12 months before you got pregnant with your new baby? Check ALL that apply ☐ Regular checkup at my family doctor's office

> ☐ Visit to have my teeth cleaned by a dentist or dental hygienist Other → Please tell us:

> > 58

☐ Regular checkup at my OB/GYN's office ☐ Visit for an illness or chronic condition

☐ Visit for family planning or birth control

☐ Visit for depression or anxiety

☐ Visit for an injury

insurance coverage before, during, and a doctor, nurse, or other health care worker do any of the following things? For each item, check No if they did not or Yes if they did. No Yes a. Tell me to take a vitamin with folic acid			
a. Tell me to take a vitamin with folic acid	8.	12 months before you got pregnant, did a doctor, nurse, or other health care worker do any of the following things? For each item,	The next questions are about your <i>health</i> insurance coverage before, during, and after your pregnancy with your <i>new</i> baby.
	b. c. d. e. f. j. k.	Tell me to take a vitamin with folic acid	with your new baby, what kind of health insurance did you have? Check ALL that apply Private health insurance from my job or the job of my husband or partner Private health insurance from my parents Private health insurance from the New Mexico Health Insurance Marketplace, http://www.bewellnm.com, or HealthCare.gov Medicaid or Centennial Care SCHIP or CHIP (New MexiKids) Family Planning or Title X Program TRICARE or other military health care Indian Health Service (IHS) or Tribal-638 health care coverage Other health insurance → Please tell us:

During your <u>most recent pregnancy</u> , what kind of health insurance did you have for your prenatal care?	12. What kind of hea <u>now</u> ?
Check ALL that apply ☐ I did not go for prenatal care → Go to Question 12 ☐ Private health insurance from my job or the job of my husband or partner ☐ Private health insurance from my parents ☐ Private health insurance from the New Mexico Health Insurance Marketplace, http://www.bewellnm.com, or HealthCare.gov ☐ Medicaid or Centennial Care ☐ SCHIP or CHIP (New MexiKids) ☐ Discount/State prenatal HRF or sliding scale ☐ TRICARE or other military health care ☐ Indian Health Service (IHS) or Tribal-638 health care coverage ☐ Other health insurance → Please tell us:	Private health i of my husband Private health i Private health i Health Insuran http://www.be Medicaid or Ce SCHIP or CHIP (Family Planning TRICARE or oth Indian Health S care coverage Other health in
☐ I did not have any health insurance for my prenatal care	13. Thinking back to with your new ba becoming pregn
f you had health insurance for your prenatal care, go to Question 11. Otherwise, go to Question 12. Did the cost of health insurance for your prenatal care cause financial problems for you or your family? No Yes	☐ I wanted to be p☐ I wanted to be p☐ I wanted to be p☐ I didn't want to in the future☐ I wasn't sure wh

alth insurance do you have Check ALL that apply nsurance from my job or the job l or partner insurance from my parents nsurance from the New Mexico ce Marketplace, wellnm.com, or HealthCare.gov entennial Care (New MexiKids) g or Title X Program her military health care Service (IHS) or Tribal-638 health nsurance — Please tell us: ealth insurance now *just before* you got pregnant aby, how did you feel about ant? Check ONE answer oregnant later oregnant sooner oregnant then be pregnant then or at any time at I wanted

DURING PREGNANCY

The next questions are about the prenatal care you received during your most recent pregnancy. Prenatal care includes visits to a doctor, nurse, or other health care worker before your baby was born to get checkups and advice about pregnancy. (It may help to look at the calendar when you answer these questions.)

14. How many weeks *or* months pregnant were you when you had your first visit for prenatal care?

Weeks OR I didn't go for prenatal care	_ Months Go to Question 16
15. Did you get prenatal care a pregnancy as you wanted	· · · · · · · · · · · · · · · · · · ·
□ No □ Yes ————	Go to Question 17

Go to Question 16

10	6.	Did any of these things keep you from gettin prenatal care when you wanted it? For each item, check No if it did not keep you from getting prenatal care or Yes if it did.
		No Yes
ć	Э.	I couldn't get an appointment when I wanted one
k	Э.	I didn't have enough money or insurance to pay for my visits
(Ξ.	I didn't have any transportation to get to the clinic or doctor's office

	the clinic or doctor's office	
d.	I couldn't take time off from work or school	
e.	I didn't have my Medicaid or Centennial Care card	
f.	I didn't have anyone to take care of my children	
g.	I didn't know that I was pregnant	
h.	I didn't want anyone else to know I was pregnant	
i.	The clinic or doctor's office was too far away	
j.	I did not believe prenatal care was important or that it would help me	
k.	I did not feel prenatal care was culturally appropriate	
l.	I didn't want prenatal care	

If you did not get prenatal car	e, go to Question
20.	

17. Where did you go most of the time for your **prenatal care visits?** Do not include visits for

Other —

Check ONE answer ☐ Private doctor's office ☐ Hospital clinic ☐ Health department clinic ☐ Community or Federally Qualified Health clinic ☐ Indian Health Service (IHS), Tribal-638, or Tribal Urban health facility

→ Please tell us:

18.	During any of your prenatal care visits, did a doctor, nurse, or other health care worker ask you any of the things listed below? For each item, check No if they did not ask you about it or Yes if they did.	
		No Yes
a.	If I knew how much weight I should gain during pregnancy	

? If you
care,
of your
not
of

a. The amount of time I had to wait ...

e. The cultural understanding or respect

demonstrated in my care.....

b.	The amount of time the doctor, nurse, or midwife spent with me	
c.	The advice I got on how to take care of myself	
d.	The understanding and respect shown toward me as a person	

No Yes

20.	During the 12 months before the <u>delivery</u> of
	your new baby, did a doctor, nurse, or other
	health care worker offer you a flu shot or tell
	you to get one?

No	
Yes	

21.	During the 12 months before the delivery o
	your new baby, did you <i>get</i> a flu shot?

Check ONI	answer

ш	INO
	Yes, before my pregnancy
	Yes, during my pregnancy

22.	During your most recent pregnancy, did
	you have your teeth cleaned by a dentist of
	dental hygienist?

dental hygienist?	
□ No □ Yes	

23. During your most recent pregnancy, did you have any of the following health conditions? For each one, check **No** if you did not have the

	condition or Yes if you aid.		
	ı	No	Ye
a.	Gestational diabetes (diabetes that started during this pregnancy)		
b.	High blood pressure (that started during this pregnancy), pre-eclampsia or eclampsia	g	
c.	Depression		
d.	Labor pains more than 3 weeks before my baby was due (preterm or early		

Labor pains more than 3 weeks before	
my baby was due (preterm or early	
labor)	

The next questions are about smoking cigarettes around the time of pregnancy (before, during, and after).

24. Have you smoked any cigarettes in the <i>past</i> 2 years?	E-cigarettes (electronic cigarettes) and other electronic nicotine products (such as vape pens,
□ No → Go to Question 28 Ves	e-hookahs, hookah pens, e-cigars, e-pipes) are battery-powered devices that use nicotine liquid rather than tobacco leaves, and produce vapor instead of smoke.
25. In the 3 months <u>before</u> you got pregnant, how many cigarettes did you smoke on an average day? A pack has 20 cigarettes.	A hookah is a water pipe used to smoke tobacco. It is not the same as an e-hookah or hookah pen.
 □ 41 cigarettes or more □ 21 to 40 cigarettes □ 11 to 20 cigarettes □ 6 to 10 cigarettes □ 1 to 5 cigarettes 	28. Have you used any of the following products in the past 2 years? For each item, check No if you did not use it or Yes if you did.
Less than 1 cigarette I didn't smoke then	a. E-cigarettes or other electronic nicotine products
26. In the <u>last 3 months</u> of your pregnancy, how many cigarettes did you smoke on an average day? A pack has 20 cigarettes.	b. Hookah
 41 cigarettes or more 21 to 40 cigarettes 11 to 20 cigarettes 6 to 10 cigarettes 	If you used e-cigarettes or other electronic nicotine products in the <i>past 2 years</i> , go to Question 29. Otherwise, go to Question 31.
Less than 1 cigaretteI didn't smoke then	29. During the 3 months <u>before</u> you got pregnant, on average, how often did you use e-cigarettes or other electronic nicotine products?
27. How many cigarettes do you smoke on an average day now? A pack has 20 cigarettes.	☐ More than once a day
☐ 41 cigarettes or more ☐ 21 to 40 cigarettes ☐ 11 to 20 cigarettes ☐ 6 to 10 cigarettes ☐ 1 to 5 cigarettes ☐ Less than 1 cigarette ☐ I don't smoke now	 □ Once a day □ 2-6 days a week □ 1 day a week or less □ I did not use e-cigarettes or other electronic nicotine products then
day? A pack has 20 cigarettes. 41 cigarettes or more 21 to 40 cigarettes 11 to 20 cigarettes 6 to 10 cigarettes 1 to 5 cigarettes 1 didn't smoke then 27. How many cigarettes do you smoke on an average day now? A pack has 20 cigarettes. 41 cigarettes or more 21 to 40 cigarettes 11 to 20 cigarettes 6 to 10 cigarettes 1 to 5 cigarettes	If you used e-cigarettes or other electronic nicotine products in the past 2 years, go to Question 29. Otherwise, go to Question 31. 29. During the 3 months before you got pregnant, on average, how often did you use e-cigarettes or other electronic nico products? More than once a day Once a day 2-6 days a week 1 day a week or less I did not use e-cigarettes or other electronic nico products?

The next questions are about using other tobacco products around the time of pregnancy.

28.	Have you used any of the following products in the past 2 years? For each item, check No if you did not use it or Yes if you did.
	No Yes
a.	E-cigarettes or other electronic nicotine products
b.	Hookah

29.	During the 3 months <u>before</u> you got
	pregnant, on average, how often did you
	use e-cigarettes or other electronic nicotine
	products?

More than once a day
Once a day
2-6 days a week
1 day a week or less
I did not use e-cigarettes or other electronic
nicotine products then

30. During the <u>last 3</u> months of your pregnancy, on average, how often did you use e-cigarettes or other electronic nicotine products?	
 More than once a day Once a day 2-6 days a week 1 day a week or less I did not use e-cigarettes or other electronic nicotine products then 	
The next questions are about drinking alcohol around the time of pregnancy.	
31. Have you had any alcoholic drinks in the past 2 years? A drink is 1 glass of wine, wine cooler, can or bottle of beer, shot of liquor, or mixed drink.	
□ No ———————————————————————————————————	3
32. During the 3 months <u>before</u> you got pregnant how many alcoholic drinks did you have in an average week?	
 14 drinks or more a week 8 to 13 drinks a week 4 to 7 drinks a week 1 to 3 drinks a week Less than 1 drink a week I didn't drink then 	
Pregnancy can be a difficult time. The next questions are about things that may have happened <u>before</u> and <u>during</u> your most recent pregnancy.	
33. During the 12 months before your new baby was born, did you ever eat less than you felt you should because there wasn't enough money to buy food?	
□ No □ Yes	

7
34. In the 12 months before you got pregnant with your new baby, did any of the following people push, hit, slap, kick, choke, or physically hurt you in any other way? For each person, check No if they did not hurt you during this time or Yes if they did.
a. My husband or partner
35. During your most recent pregnancy, did any of the following people push, hit, slap, kick, choke, or physically hurt you in any other way? For each person, check No if they did not hurt you during this time or Yes if they did.
a. My husband or partner
AFTER PREGNANCY
The next questions are about the time since your new baby was born.
36. When was your new baby born?
Month Day Year
Month Day Year
37. How was your new baby delivered?
☐ Vaginally → Go to Page 8, Question 39

Go to Page 8, Question 38

•		
38.	it۱	hich statement best describes whose idea was for you to have a cesarean delivery section)? Check ONE answer
		My health care provider recommended a cesarean delivery before I went into labor My health care provider recommended a cesarean delivery while I was in labor I asked for the cesarean delivery
39.		fter your baby was delivered, was he or she ut in an intensive care unit (NICU)?
		No Yes I don't know
40.		fter your baby was delivered, how long did e or she stay in the hospital?
		Less than 24 hours (less than 1 day) 24 to 48 hours (1 to 2 days) 3 to 5 days 6 to 14 days More than 14 days My baby was not born in a hospital My baby is still in the hospital Go to Question 43
41.	ls	your baby alive now?
\downarrow	_	No — We are very sorry for your loss. Yes Go to Page 11, Question 60
42.	ls	your baby living with you now?
↓		No Go to Page 11, Question 60 Yes
Go	to	Question 43

a. My doctor
milk to feed your new baby, even for a short period of time? One Holden State of the Page 10, Question State of the Page 10
Yes

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Less than 1 w	veek				
Weeks	OR		Months		
			np to exp	ress ı	nilk
			Go to Or	iestic	on 50
No ——— Yes			GO tO Qt		
	ve you used	ve you used a brea feed to your new b	ve you used a breast pun feed to your new baby?	ve you used a breast pump to exp feed to your new baby?	ve you used a breast pump to express r feed to your new baby?

			9
49.	Did your health insurance pay for a br pump for you to use with your <i>new</i> ba		t
	 □ No □ Yes, but I had to make a co-payment □ Yes, with no co-payment □ I did not have health insurance □ I don't know 		
	your baby was not born in a hospital, g age 10, Question 51.	jo to	•
50.	This question asks about things that r have happened at the hospital where new baby was born. For each item, che it did not happen or Yes if it did.	you	
a.	Hospital staff gave me information	No	Yes
b.	about breastfeeding My baby stayed in the same room with		
υ.	me at the hospital		
c. d.	I breastfed my baby in the hospital Hospital staff helped me learn how to		Ц
u.	breastfeed		
e.	I breastfed in the first hour after my baby was born		
f.	My baby was placed in skin-to-skin contact within the first hour of life		
g.	My baby was fed only breast milk at the hospital		П
h.	Hospital staff told me to breastfeed		
i.	whenever my baby wanted The hospital gave me a breast pump to		
	use		
j.	The hospital gave me a gift pack with formula		
k.	The hospital gave me a telephone number to call for help with breastfeeding		
l.	Hospital staff gave my baby a pacifier		

51. How old was your new baby the first time he or she had liquids other than breast milk (such as formula, water, juice, or cow's milk)?	55. L ໄ ເ i
 Weeks OR Months □ My baby was less than 1 week old □ My baby has not had any liquids other than breast milk 	a. II b. C c. C
If your baby is still in the hospital, go to Question 60. 52. In which <i>one</i> position do you <i>most often</i> lay your baby down to sleep now?	e. II f. V g. V ii h. V
Check ONE answer	r r
On his or her sideOn his or her backOn his or her stomach	56. I
53. In the <i>past 2 weeks</i> , how often has your new baby slept alone in his or her own crib or bed?	(
Always Often Sometimes Rarely Never Go to Question 55	a. F s b. F k c. F d. V
54. When your new baby sleeps alone, is his or her crib or bed in the same room where <u>you</u> sleep?	57. H
□ No □ Yes	-

55.	Listed below are some more things about how babies sleep. How did your new baby usually sleep in the <u>past 2 weeks?</u> For each item, check No if your baby did not usually sleep like this or Yes if he or she did.
a. b. c. d. e. f. g.	In a crib, bassinet, or pack and play
56.	Did a doctor, nurse, or other health care worker tell you any of the following things? For each thing, check No if they did not tell you or Yes if they did.
a. b. c. d.	Place my baby on his or her back to sleep
57.	How many times has your new baby gone for care when he or she was sick?
	Times None → Go to Question 59 My baby has not been sick My baby is still in the hospital Go to Question 60

58. Has your new baby gone for care as many times as you wanted when he or she was sick?
No Yes → Go to Question 60
59. Did any of these things keep you from taking your baby for care when he or she was sick?
Check ALL that apply
 I didn't have health insurance to pay for the visit I couldn't get an appointment I didn't have a regular doctor for my baby I had no way to get my baby to the clinic or doctor's office I didn't have anyone to take care of my other children Other → Please tell us:
60. Are you or your husband or partner doing anything now to keep from getting pregnant? Some things people do to keep from getting pregnant include having their tubes tied, using birth control pills, condoms, withdrawal, or natural family planning.
☐ No ☐ Yes ☐ Go to Question 62
Go to Question 61

Skyla®)

☐ Contraceptive implant in the arm (Nexplanon® or Implanon®)

☐ Natural family planning (including rhythm method)

☐ Withdrawal (pulling out)

☐ Not having sex (abstinence)

☐ Other → Please tell us:

Since your new baby was born, have you had a postpartum checkup for yourself? A postpartum checkup is the regular checkup a woman has about 4-6 weeks after she gives	66. Since your new baby was born, how often have you had little interest or little pleasure in doing things you usually enjoyed?
birth.	☐ Always ☐ Often
□ No → Go to Question 65 Ves	☐ Sometimes ☐ Rarely ☐ Never
64. During your postpartum checkup, did a	OTHER EXPERIENCES
doctor, nurse, or other health care worker do any of the following things? For each item, check No if they did not do it or Yes if they did.	The next questions are on a variety of
No Yes	topics.
a. Tell me to take a vitamin with folic acid b. Talk to me about healthy eating,	67. Are you Hispanic, Spanish, or Latina?
exercise, and losing weight gained during pregnancy	□ No □ Yes
c. Talk to me about how long to wait before getting pregnant again	w
d. Talk to me about birth control methods I can use after giving birth	68. Which one or more of the following would you say is your race?
e. Give or prescribe me a contraceptive	Check ALL that apply
method such as the pill, patch, shot	American Indian or Alaska Native
(Depo-Provera®), NuvaRing®, or condoms	Tribe:
f. Insert an IUD (Mirena®, ParaGard®,	☐ Asian
Liletta®, or Skyla®) or a contraceptive implant (Nexplanon® or Implanon®)	☐ Black or African American☐ Native Hawaiian or Other Pacific Islander
g. Ask me if I was smoking cigarettes	☐ White
h. Ask me if someone was hurting me	☐ Other → Please tell us:
emotionally or physically	
i. Ask me if I was feeling down or depressed	
j. Test me for diabetes	69. Which one of these best describes you?
	Check ONE answe
55. Since your new baby was born, how often have you felt down, depressed, or hopeless?	American Indian or Alaska Native
☐ Always	│
☐ Often	Hispanic, Spanish, or Latina
☐ Sometimes ☐ Rarely	☐ Native Hawaiian or Other Pacific Islander☐ White
☐ Never	☐ Other → Please tell us:

70. Within the past 12 months, when seeking health care, did you feel your experiences were worse than, the same as, or better than for people of other races (or ethnicities)?	72. During your most recent pregnancy, did you receive any of the following services? For each one, check No if you did not receive the service or Yes if you did.
Check ONE answer ☐ Worse than other races ☐ The same as other races ☐ Better than other races ☐ Worse than some races, better than others ☐ I only encountered people of the same race ☐ I did not have health care in past 12 months ☐ Don't know / Not sure 71. During the month before you got pregnant, did you take or use any of the following drugs for any reason? Your answers are strictly confidential. For each item, check No if you did	a. Counseling or a support group for depression
not use it or Yes if you did. No Yes a. Prescription for depression or anxiety	If your baby is not alive or is not living with you, go to Question 75. 73. Since your new baby was born, have you used
 b. Over-the-counter pain relievers such as aspirin, Tylenol®, Advil®, or Aleve®	any of these services? For each one, check No if you did not use the service or Yes if you did.
hydrocodone (Vicodin®), oxycodone (Percocet®), or codeine	a. A breastfeeding class or peer counseling support

	your baby is still in the hosuestion 75.	spital, go to
74.	Please read each stateme you feel about your baby manage his or her crying. No if you did not apply to y	's crying or how you For each one, check
		No Yes
a.	I can almost always get my crying	
b.	In the past week, I have car	ried my baby
	in my arms or in a cloth bab 5 or more hours every day	
c.	I think that picking up a bal	
	he or she cries will spoil the	•
d.	I sometimes feel overwhelr baby's crying	
'5 .	At any time during <i>your m</i> pregnancy, did you work	
abla	□ No ───────────────────────────────────	Go to Question 78
76.	Have you returned to the your most recent pregnan	
		Check ONE answer
	☐ No, and I do not plan	
(to return ————————————————————————————————————	Go to Question 78
Ţ	Yes	-5
77	Did you take leave from w baby was born?	ork <i>after</i> your new
•		
		Check ALL that apply

The last questions are about the time during the 12 months before your new baby was born.

b h ir a <i>ir</i>	eaby was loousehold ncome, yo ny other in	oorn, what I income bur husband ncome you In will be kep	d's or partne may have re	rearly total ? Include your r's income, and
79. E	\$16,001 \$20,001 \$24,001 \$28,001 \$32,001 \$40,001 \$48,001 \$57,001 \$60,001 \$73,001 \$85,001	to \$20,000 to \$24,000 to \$24,000 to \$28,000 to \$32,000 to \$40,000 to \$48,000 to \$57,000 to \$60,000 to \$73,000 or more		
	Peop			
80. V	Vhat is to	day's date	?	
N	lonth	/ Day	20 Year	

Please use this space for any additional comments you would like to make about your experiences around the time of your pregnancy or the health of mothers and babies in New Mexico.

Thanks for answering our questions!

Your answers will help us work to keep mothers and babies in New Mexico healthy.

GLOSSARY

Binge Drinking

Having 4/5 or more alcoholic beverages on one occasion (the definition was 5+ from 2005-2008, and 4+ from 2009-2011).

Cigarette Smoking

The smoking of any cigarettes. If the mother said she did not know how many cigarettes she smoked, she was coded as a smoker.

Diabetes, Pre-existing

Type 1 or Type 2 diabetes that was diagnosed before pregnancy.

Diabetes, Gestational

Diabetes that started during pregnancy.

Families FIRST

Families FIRST provide prenatal and postpartum case management support to Medicaid-eligible women and their families. Services include comprehensive psychosocial assessment, support with Medicaid enrollment and education on prenatal health and infant care. Home visiting is offered for both expecting and newly-delivered moms and their families.1

Frequent Alcohol Use

Having seven or more drinks in one week.2

Intention of Pregnancy

Mothers were asked how they felt about being pregnant at the time of conception. Mothers could respond that they wanted to be pregnant either 1) sooner, 2) later, 3) then, or 4) not then or at any time. "Later" responses meant a mistimed pregnancy; "Not then or at any time" referred to an unwanted pregnancy. Mothers who selected either of these two responses (a mistimed or unwanted pregnancy) were categorized overall as having an "Unintended pregnancy."

Kotelchuck Index

Also called the Adequacy of Pregnancy Care Utilization. Index. The index is used to measure prenatal care levels. The Kotelchuck Index is derived from a ratio of actual to recommended number of visits, according to the infant's gestational age at delivery. Women with adequate prenatal care began prenatal visits during the 1st trimester and had an appropriate number of prenatal care visits according to infant gestational age.1

Low Birth Weight

Low Birth Weight Infants who weigh less than 2500 grams at birth.

Overweight

BMI (Body Mass Index) was calculated from the mother's self-reported pre-pregnancy weight and height and was determined by dividing her weight (in kg) by height square (in meters). A mother with a BMI of 25 or more was classified as being overweight.4

Payer of Prenatal Care

Mother could choose up to 6 options for the payer of their prenatal care, including Indian. Health Service (IHS) with or without other payers, Medicaid with or without other private insurance but without IHS, private insurance only, or none of the payers (i.e., no insurance at all).

Postpartum

After childbirth.

Preconception

Preconception Before conception/pregnancy.

Prenatal

Prenatal The period of time between conception and birth (usually 9 months).

Preterm Birth

Preterm. Birth Infants with gestational age less than 37 completed weeks.

Stress, Emotional

Stress, emotional The mother answered "yes" to any of the following: A close family member was very sick and had to go into the hospital; Someone very close to her died.

Stress, Financial

Stress, financial The mother answered "yes" to any of the following: She had a lot of bills she couldn't pay; Her husband/partner lost his job; She lost her job; She moved to a new address.

Stress, Partner-related

Stress, partner-related The mother answered "yes" to any of the following: She was separated/divorced from husband/partner; She argued with husband/partner more than usual; Husband/partner said he didn't want her to be pregnant.

Stress, Traumatic

The mother answered "yes" to any of the following: Someone close to her had a problem with drinking or drugs; Husband/ partner went to jail; She was in a physical fight; She was homeless.

