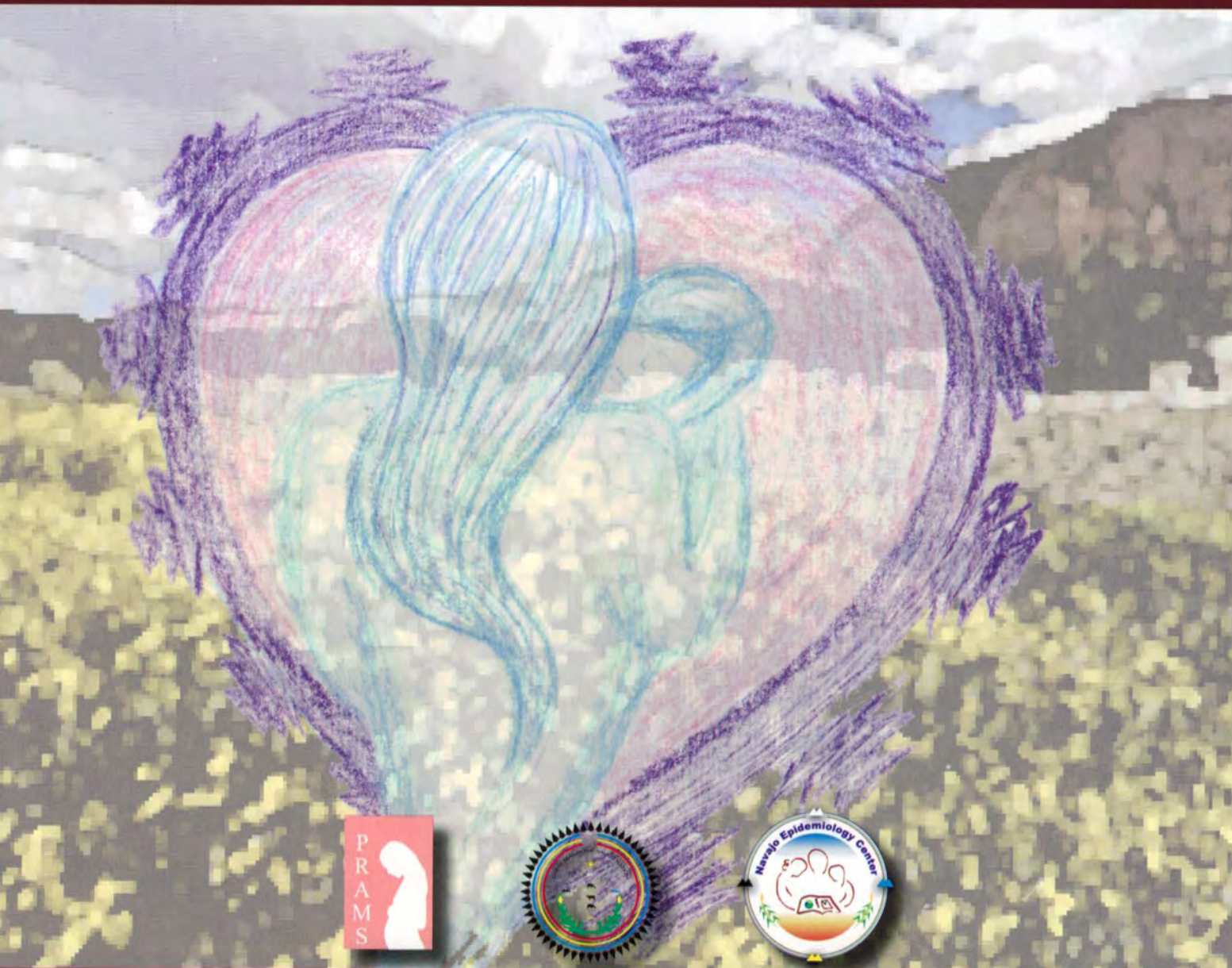


REPORT ON NEW MEXICO NAVAJO MOTHERS AND THEIR INFANTS, 2000-2004

Based on New Mexico Pregnancy Risk Assessment Monitoring System (PRAMS)
Surveillance Data



PUBLISHED BY THE NAVAJO EPIDEMIOLOGY CENTER, NAVAJO DIVISION OF HEALTH



Photo Courtesy of Gayle Williamson.

Foreword

This report, entitled *Report on New Mexico Navajo Mothers and Their Infants 2000-2004* is the first published report to come from the Navajo Epidemiology Center (NEC) and the Navajo PRAMS (Pregnancy Risk Assessment Monitoring System) Workgroup. This report focuses on Navajo mothers living in New Mexico and is intended to inform and educate decision makers, the public and health care providers about the health of Navajo mothers and infants in New Mexico.

Reports such as these are routinely published by state health departments and public health agencies. They are invaluable tools for making key public health decisions and taking action based on data. Mothers and their infants constitute an important population and surveys such as the New Mexico PRAMS survey help to broaden our understanding of what we are doing well and how we can improve maternal and infant health.

The NEC has catalogued maternal and child health reports from other public health agencies that contain public health data relevant to Navajo mothers and infants. However, to date it has not published its own pregnancy risk assessment report specific 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

This report is the result of a continuing collaboration between the New Mexico PRAMS/Maternal Child Health Epidemiology Program, the Navajo Division of Health, the Navajo Epidemiology Center, the Navajo Nation WIC (Women, Infants and Children) Program, and the Navajo Area Indian Health Service. The following individuals represent these organizations. Their contribution to this report and the cause of healthy Navajo mothers and infants is acknowledged and applauded.

Eirian Coronado, New Mexico Department of Health, PRAMS program

Joquetta DeGroat, Navajo Area Indian Health Service

Roberta Duncan, Maternal and Child Health Advocate

Jean Howe, Navajo Area Indian Health Service

Jennifer Hudson, New Mexico Department of Health, PRAMS program

Adele King, Navajo Women, Infants and Children (WIC) program

Deborah Klaus, Navajo Epidemiology Center

Dornell Pete, Navajo Epidemiology Center

Carmelita Sorrelman, Navajo Area Indian Health Service

Diana Hu, Tuba City Regional Health Care Corporation

Special Thanks

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



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PRAMS Survey - Phase 5

Navajo Epidemiology Center



The Navajo Epidemiology Center (NEC) was established in September 2005 with the intention of identifying high priority Navajo health status objectives, developing disease surveillance systems, and implementing disease control and prevention programs across Navajo Nation. The NEC is a program within the Navajo Division of Health, which serves one of the largest Native American tribes in the United States. The Navajo Nation has a population of approximately 205,000 Navajos living within Navajo Nation boundaries, plus another 30,000 living in border areas. It serves an area of 27,000 square miles in the southwest United States. Portions of the states of Arizona, New



(L-R): Navajo Epidemiology Center (NEC) epidemiologists: Deborah Klaus and Dornell Pete.

Mexico, and Utah extend into Navajo Nation lands, necessitating working relationships with the “three states” on a number of fronts, including public health.

Established in 1977, the Navajo Division of Health administers health programs across Navajo Nation, including bioterrorism/emergency response, planning/research/evaluation, aging, community health representative, health education, breast and cervical cancer screening, diabetes, behavioral health, food distribution, Women, Infants and Children (WIC) program, New Dawn program, Office of Uranium Workers, environmental health, and epidemiology.

What is PRAMS?

PRAMS is the Pregnancy Risk Assessment Monitoring System. It is a multi-year, population-based surveillance system sponsored by the Centers for Disease Control and Prevention in 37 U.S. states, including New Mexico.¹ 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.



Dornell Pete (Far Right), Epidemiologist, Navajo Epidemiology Center, is pictured with New Mexico PRAMS staff (L-R): Jennifer Hudson, Epidemiologist; Dorin Sisneros, Data Manager; Rebecca Garcia, Data Collection Specialist; and Eirian Coronado, Director, with daughter Illiana.

Navajo PRAMS Workgroup

In 1996 the New Mexico PRAMS program initiated a working relationship with the Navajo Division of Health to better collect surveillance data on Navajo mothers and their infants who reside in New Mexico. This collaboration between the New Mexico PRAMS and Navajo Division of Health led to the establishment of the Navajo PRAMS Workgroup, which is comprised of the following member organizations:

- New Mexico PRAMS/ Maternal Child Health Epidemiology program
- Navajo Epidemiology Center
- Navajo Nation WIC (Women, Infants and Children) program
- Navajo Area Indian Health Service



Eirian Coronado, New Mexico PRAMS Program Director, with daughter Illiana.

Notes:

1. For more information, see Centers for Disease Control and Prevention (CDC) website: <http://www.cdc.gov/prams>.



PRAMS Methodology

This report analyzed New Mexico PRAMS surveillance data for Navajo mothers and infants residing in the state of New Mexico. Mothers who self-identified themselves as Navajo on their infants' birth certificates were considered eligible to be included in this report. While Arizona fulfills many maternal and child health functions, it does not participate in the national PRAMS program and, therefore, this report does not include data for Navajo mothers residing in Arizona.

The following sections describe in greater detail the PRAMS methodology undertaken by the state of New Mexico and the CDC and which were used to collect the survey data included in this report.

Population and Sample

The eligible NM PRAMS population included all New Mexico resident mothers giving live 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 NM PRAMS population size was smaller than the number of live

births reported by the New Mexico Bureau of Vital Records and Health Statistics.¹ Each month, a stratified sample of eligible New Mexico mothers was randomly drawn (approximately 180 new mothers) from eligible birth certificates at the New Mexico Bureau of Vital Records and Health Statistics. In 2000 NM PRAMS over-sampled low birth weight infants. From 2001 onward, NM PRAMS did not over-sample by birth weight but instead sampled eligible new mothers equally across its five Public Health Districts (see map on facing page), with approximately one out of every 12 mothers with a live birth being selected to receive a survey.

PRAMS Data Collection

According to New Mexico PRAMS data collection procedures, each year those new mothers who were sampled to receive a survey were mailed a survey up to 3 times between 2 to 6 months after delivery. The survey was voluntary. Survey recipients were asked to complete the survey and mail it back to the NM PRAMS program. The mailed survey included a cover letter, the 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 for participation. The incentive in 2004-2005 was a pre-paid telephone calling card and the additional reward was a raffle for a \$100 gift certificate. Those mothers who did not return the survey 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 2-6 months after birth, and telephone interviews ended 90 days after the first mailing. About six months after data collection ended, the survey data were submitted to the CDC for cleaning and statistical weighting. The CDC then returned the weighted data to New Mexico PRAMS, which then analyzed and published New Mexico PRAMS surveillance reports; the latest NM report covered births for the years 2004-2005.

The PRAMS Questionnaire

Developed by the CDC, the PRAMS Questionnaire consisted of two parts: 1) a Core portion that was the same for all participating states and 2) a state-specific portion that was tailored to New Mexico's needs. Topics in the Core portion included:

Notes:

1. New Mexico Selected Health Statistics Annual Report for 2004. Santa Fe, NM: New Mexico Department of Health, Bureau of Vital Records and Health Statistics, 2006.

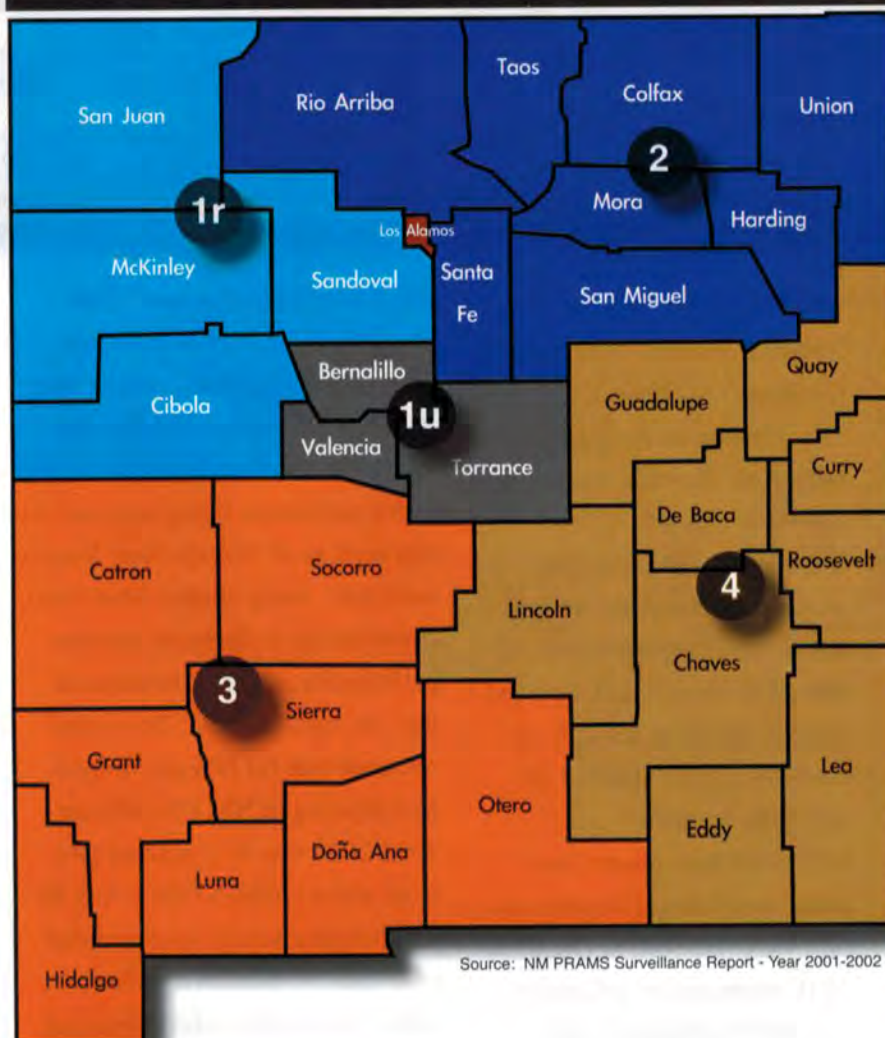
- Barriers to and content of pre-natal care
- Obstetric history
- Maternal use of alcohol and cigarettes
- Nutrition
- Economic status
- Maternal stress
- Early infant care and breast-feeding
- Health status

PRAMS Questionnaire Phases and Changes

Every five years the CDC reviews its PRAMS survey instrument, adding, deleting, and/or modifying the survey. In some cases when questions are not considered productive or relevant, those questions are dropped, clarified, or modified. States can also recommend additional state-specific questions for inclusion in the questionnaire.

In the period from January 2000 to December 2003, NM PRAMS administered the Phase 4 CDC PRAMS questionnaire. The Phase 4 version of the survey can be accessed online at www.health.state.nm.us/phd/prams/report_surveillance/19_questionnaire.pdf. From January 2004 onward, the program administered the Phase 5 questionnaire (see Appendix), which included the following changes that may account for differences in multi-year comparisons across these

The New Mexico Public Health Districts



Source: NM PRAMS Surveillance Report - Year 2001-2002.

The New Mexico Public Health Districts at the time of data collection:

- District 1r (Rural) - Cibola, McKinley, Sandoval, and San Juan, not including Bernalillo and Rio Rancho cities.
- District 1u (Urban) - Bernalillo, Torrance, and Valencia, including Bernalillo and Rio Rancho cities.
- District 2 (Northeast) - Colfax, Harding, Mora, Rio Arriba, San Miguel, Santa Fe, Taos, and Union.
- District 3 (Southwest) - Catron, Dona Ana, Grant, Hidalgo, Luna, Otero, Sierra, and Socorro.
- District 4 (Southeast) - Chaves, Curry, De Baca, Eddy, Guadalupe, Lea, Lincoln, Quay, and Roosevelt.

two survey phases:

- Question 3 on Multivitamin use, which began “In the month

before...” in Phase 4, was changed to “During the month before...” in Phase 5. Also,

Continued on next page.

NM PRAMS Response Rates of Navajo Women by Year, 2000-2004

	Year of Infants Birth					
	2000	2001	2002	2003	2004	2000-2004
No. Responded	133	149	125	88	91	586
No. Sampled	198	249	197	153	161	958
% Responded	67.2%	59.8%	63.5%	57.5%	56.5%	61.2%

Continued from previous page.

- “prenatal vitamin” was added to Question 3 in Phase 5.
- The question on Awareness of Folic Acid Benefits was removed in Phase 5.
- The write-in option for the question on Smoking Before and During Pregnancy was removed in Phase 5 and replaced with an option to select from categories of the number of cigarettes smoked.
- In Phase 5 the options “nor-plant” and “shots [DepoProvera]” were removed in Question 12 (Contraception at Conception and Postpartum), and “cervical ring” was added as an option.

Data Limitations and Bias

As with all surveys, self-selection is an inherent bias. In addition, when response rates are not high, there is concern that bias may

result from non-response. That is, participants may be different from non-participants, calling into question the degree to which the information collected applies to the entire population being sampled (in this case, to all Navajo New Mexico mothers). Many studies have demonstrated the differences between participants and non-participants that can result in bias. The overall response rate for Navajo mothers participating in NM PRAMS for 2000-2004 was 61.2 percent (see table above), which falls below the CDC-recommended response rate of at least 70 percent in order to make statistically valid inferences from the sampled population. As a result, the data presented in this report may not be representative of all Navajo mothers living in New Mexico. Still, the data are weighted so that the Navajo mothers who participated in this survey do provide important information about the Navajo maternal population residing and giving live birth in New

Mexico from 2000-2004.

Data Analysis

This report contains mainly descriptive analyses of the survey data. We report the NM Navajo mothers' answers to the survey questions and stratify their answers by 7 demographic factors (called “maternal characteristics” in the tables): age, education, marital status, previous live birth, residence, public assistance, and prenatal care payer. We also tested whether or not there were statistically significant associations (or relationships) between each question and these same seven demographic factors using the Chi-Square test. The Chi-Square test generates a P-Value, which indicates how much confidence we can have that the association is real and not due to chance alone. In this report we use a P-Value of 0.05 as the cut-off point for statistical significance; that is, a P-Value less than 0.05 (which is the same as 5%) indicates a statistically significant association has been found.



Definition of Factors

The following factors were used in the PRAMS survey and were defined as follows:

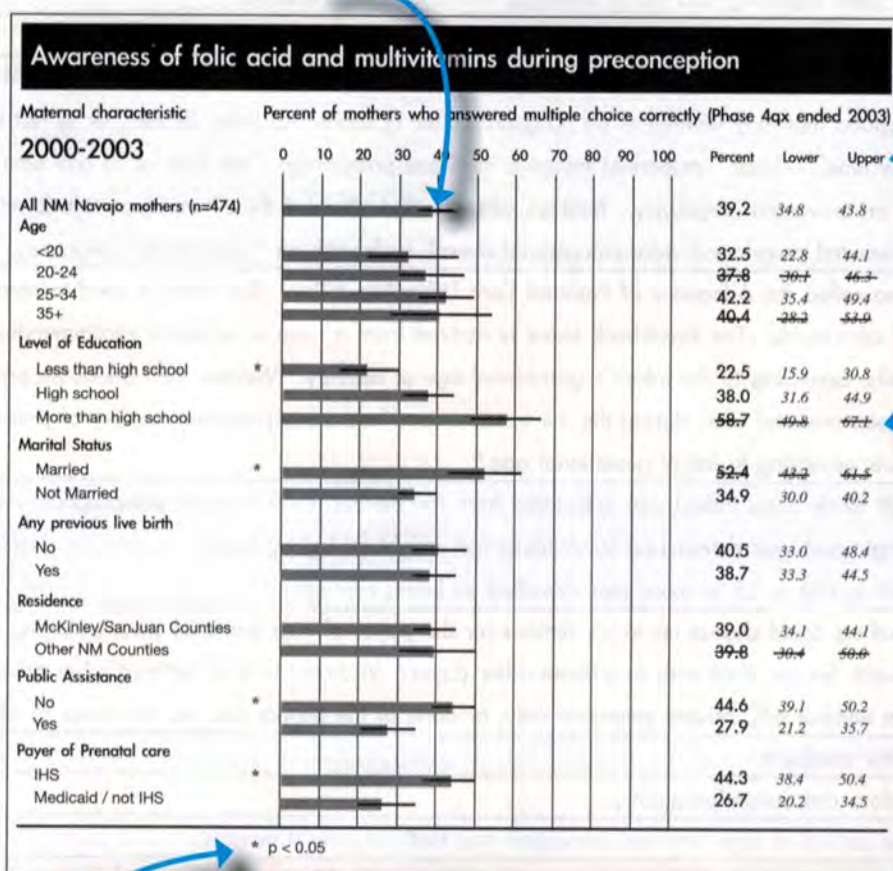
Factor	Definition
Binge Drinking:	Having 5 or more alcoholic beverages on one occasion.
Cigarette Smoking:	The smoking of any cigarettes. If the mother said she did not know how many cigarettes she smoked, she was coded as a smoker.
Diabetes:	Includes pre-existing diabetes, gestational diabetes and high blood sugar.
Families FIRST:	Families FIRST provides 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." ³
Kotelchuck Index:	Also called the Adequacy of Prenatal 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. ⁴
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 squared (in meters). A mother with a BMI of 25 or more was classified as being overweight. ⁵
Payer of Prenatal Care:	Mothers could choose up to six 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).
Post-partum:	After childbirth.
Preconception:	Before conception/pregnancy.
Prenatal:	The period of time between conception and birth (usually 9 months).
Public Assistance:	Mothers were asked about income sources during the 12 months after the baby was born. Mothers could choose among the following 7 options: "Aid such as Temporary Assistance for Needy Families (TANF), welfare, WIC, public assistance, general assistance, food stamps, or Supplemental Security Income."

Notes:

1. New Mexico Pregnancy Risk Assessment Monitoring System Surveillance Report 2004-2005 Births.
2. Naima, TS, Brewer RD, Mokdad AH, Denny C, Serdula M, Marks JS. Binge drinking among U.S. adults. JAMA 2003; 289:0-75.
3. CDC definition of pregnancy intention: <http://www.cdc.gov/reproductivehealth/unintendedpregnancy/index.htm>.
4. New Mexico Pregnancy Risk Assessment Monitoring System Surveillance Report 2004-2005 Births.
5. CDC BMI guidelines: <http://www.dcd.gov/nccdphp/dnpa/obesity/defining/htm>.

How to Read the Tables in This Report

What is a Confidence Interval? In the tables the Confidence Interval is depicted by "error bars" on each bar graph (the dark line drawn through the gray bar graph). 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 or confidence intervals. Confidence Intervals will vary between narrow intervals (more precise) and wide intervals (less precise). The tables in this report are based on a 95% Confidence Interval with the width of the interval indicating how much "confidence" we have that the interval contains true values. For example, in the sample page below we are 95% confident that the actual percentage of all NM Navajo Mothers who were Aware that Folic Acid Prevents Birth Defects was between 34.8% and 43.8%. A very wide interval (depicted by strikethroughs in the tables) 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 trustworthy. Determination of which intervals are narrow and which are wide is based on several statistical factors, including the number of respondents.



In this report, the "Lower" and "Upper" values are the 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.

What is the P-value or Statistical Significance? For this report the Chi-square was used to test the association between a maternal characteristic and a maternal health topic. The Chi-square test calculated a P-Value and determined if the association between maternal characteristic and maternal health topic was "statistically significant." If the calculated P-Value was < 0.05, then the association between the groups was considered to be statistically significant. In this table, the Chi-square tested the association between "Payer of Prenatal Care," (the maternal characteristic) and "Awareness of Folic Acid and Multivitamins during Preconception," (the maternal health topic). The calculated P-Value for this test was < 0.05, making it statistically significant. Therefore, Payer of Prenatal Care was statistically associated with the Awareness of Folic Acid and Multivitamins during Preconception.

Data Comparisons

The following data are from mothers who participated in the 2002-2004 New Mexico PRAMS Survey, including Navajo mothers who are included in this report, and the 2002 National PRAMS Surveillance Report.¹ The New Mexico data were sub-grouped into: 1)

NM Navajo mothers, 2) NM Other Native American (Non-Navajo) mothers, and 3) NM All mothers.

The National PRAMS data included mothers from 27 states.

The purpose of the table is to summarize and show the differences

and/or similarities of maternal behaviors and experiences between NM Navajo mothers and other mothers in New Mexico and nationally. Comparisons such as these can show us if Navajo mothers' experiences are different, which can help us better meet their needs.

Maternal Characteristics of Women who Participated in the New Mexico PRAMS (2002-2004) and National PRAMS (2002) Surveys

Maternal Characteristic	NM Navajo Mothers (N=586) (%)	NM Other Native American (Non-Navajo) Mothers (N=292) (%)	NM All Mothers (N=7734) (%)	National PRAMS (2002) (%)
Alcohol and Drug Use				
Frequent or binge alcohol use in the 3 months before pregnancy	15.9	24.2	18.0	47.5
Alcohol use in last trimester of pregnancy	5.4	N/A	4.9	5.6
Program to stop using drugs or alcohol during pregnancy	2.2	N/A	0.95	DNC
Program to stop using drugs or alcohol after delivery	2.3	N/A	0.95	DNC
Breastfeeding				
Ever breastfed - initiation	83.6	78.4	81.9	72.7
Breastfed for at least 2 months duration	58.1	53.2	56.3	DNC
Breastfeeding class or support group during pregnancy	12.7	12.6	16.2	DNC
Breastfeeding class or support group after delivery	10.1	N/A	11.0	DNC
Contraception Use				
Did not use contraception at time of conception	64.6	59.7	55.1	DNC
Postpartum contraception use	77.8	84.2	86.4	85.2

Notes:

1. The National 2002 PRAMS Surveillance Report can be found at www.cdc.gov/prams/2002PRAMSSurvReport/PDF/2k2PRAMS.pdf

N/A = Data not available due to small sample size.

DNC = Data not collected.

Maternal Characteristic	NM Navajo Mothers (N=586) (%)	NM Other Native American (Non-Navajo) Mothers (N=292) (%)	NM All Mothers (N=7734) (%)	National PRAMS (2002) (%)
Counseling Services				
Counseling during pregnancy	7.0	N/A	5.6	DNC
Counseling after delivery	4.5	N/A	4.5	DNC
Diet and Nutrition				
Prepregnancy overweight	54.5	49.3	39.5	DNC
Diabetes that started before or during pregnancy	12.0	14.7	8.1	DNC
Food insufficiency - sometimes or often did not have enough food to eat	25.5	12.2	14.9	DNC
WIC services during pregnancy	70.1	63.6	55.8	41.8
Families FIRST Services				
Families FIRST services during pregnancy	5.1	N/A	6.8	DNC
Families FIRST services after delivery	4.0	N/A	5.4	DNC
Folic Acid/Multivitamin Use				
Awareness that folic acid prevents birth defects	39.2	49.5	62.6	DNC
Preconception multivitamin use at least 4 times a week	25.1	28.2	29.4	34.3
Home Visiting Services				
Home visiting services during pregnancy	6.6	15.1	5.4	DNC
Home visiting services after delivery	12.0	16.8	9.1	DNC
Infant Sleep Position				
Usually placed their infant to sleep on his/her back	78.2	79.6	64.9	65.1
Oral Health				
Oral Health discussion during pregnancy	29.3	36.0	26.2	DNC
Oral health services during pregnancy - went to dentist or dental clinic	24.3	35.1	32.5	DNC
Parenting Classes				
Parenting class during pregnancy	15.7	13.0	17.4	DNC
Parenting class after delivery	6.7	N/A	5.5	DNC

Notes:

N/A = Data not available due to small sample size.

DNC = Data not collected.

Maternal Characteristic	NM Navajo Mothers (N=586) (%)	NM Other Native American (Non-Navajo) Mothers (N=292) (%)	NM All Mothers (N=7734) (%)	National PRAMS (2002) (%)
Physical Abuse				
Physical abuse by husband or partner in the year before pregnancy	14.6	13.6	9.2	4.6
Physical abuse by husband or partner in the year before baby's birth	11.4	9.4	6.3	3.7
Program for protection from family violence during pregnancy	3.3	N/A	2.0	DNC
Program for protection from family violence after delivery	2.5	N/A	1.2	DNC
Pregnancy Intention				
An unintended pregnancy resulting in live birth	53.8	48.1	43.5	42.6
An unwanted pregnancy	16.1	14.4	10.2	10.1
Prenatal Care				
Medicaid Coverage for Prenatal Care	58.8	67.9	50.0	36.8
Late (after 1st trimester) or no prenatal care reported from birth certificate	40.6	33.6	29.3	21.1
Adequate Prenatal care (Kotelchuck Index) (See Definitions page 9.)	37.1	34.9	33.6	DNC
Programs for Teens				
Program for teens during pregnancy	16.1	N/A	4.1	DNC
Program for teens after delivery	9.2	N/A	8.9	DNC
Tobacco/Cigarette Use				
Cigarette smoking in the 3 months before pregnancy	13.5	16.5	21.3	23.2
Cigarette smoking in the last trimester of pregnancy	4.0	N/A	9.5	13.1
Smoking cessation program during pregnancy	0.7	N/A	0.8	DNC
Smoking cessation program after delivery	0.8	N/A	0.5	DNC

Notes:

N/A = Data not available due to small sample size.

DNC = Data not collected.

DEMOGRAPHICS

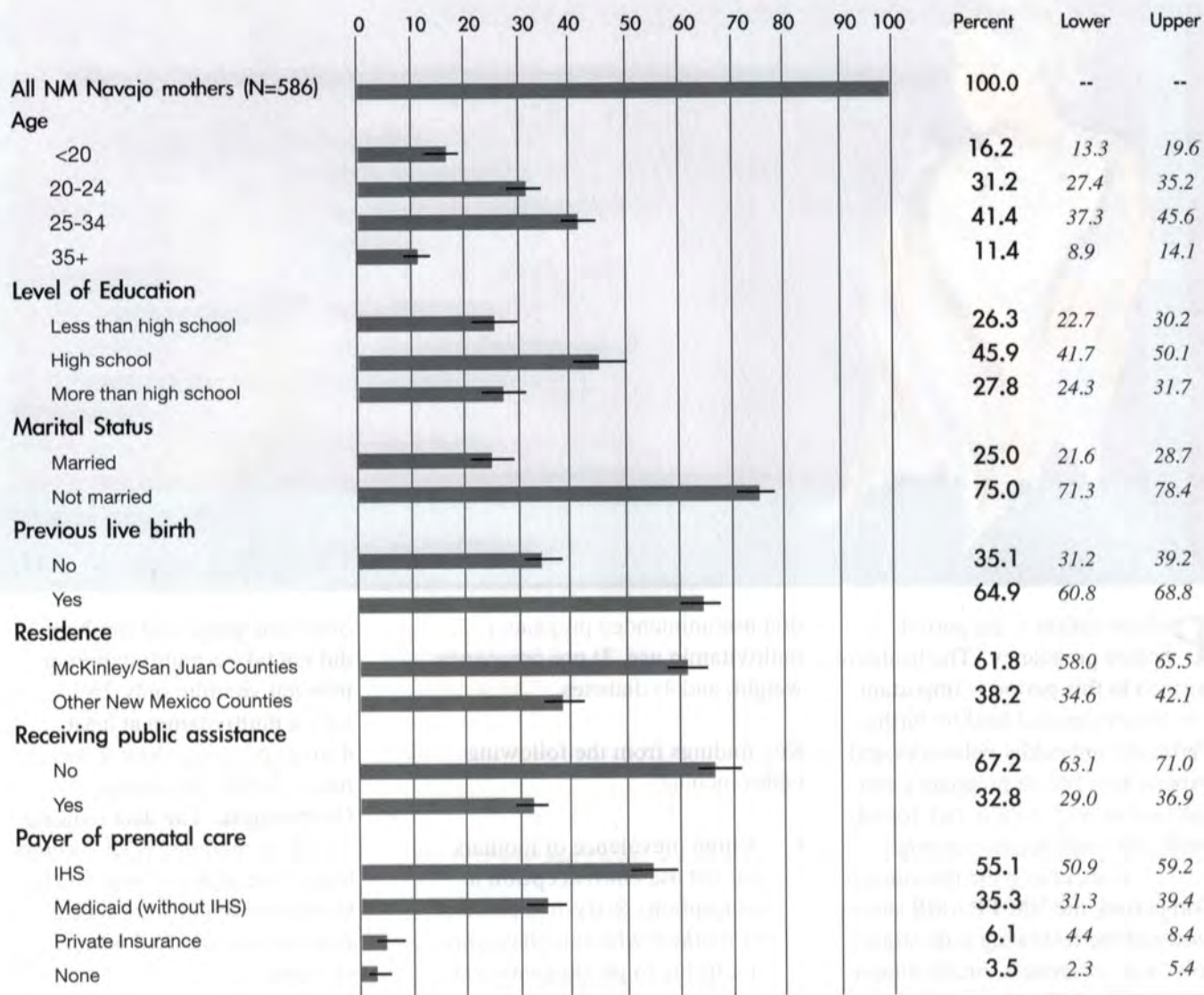


Demographics are the characteristics of a population. For this report, the population is comprised of the 586 Navajo women who participated in the New Mexico PRAMS survey from 2000 to 2004. The demographics collected were: age, level of education, marital status, and county of residence. The demographic table on the next page shows the following about the New Mexico Navajo mothers in this report:

- Most had at least a high school education.
- Most were between 20 and 34 years of age.
- Most were not married.
- Most lived in either McKinley or San Juan counties.

Demographic characteristics of NM Navajo mothers

2000-2004 births



Based on this table, the majority of the 586 Navajo mothers who participated in the New Mexico PRAMS Survey were 20-34 years old, were not married, had had a previous live birth, resided in McKinley/San

Juan Counties (the two major New Mexico Counties overlapping the Navajo Nation), were not receiving public assistance, and had the Indian Health Service (IHS) as their payer of prenatal care.

PRECONCEPTION



Preconception is the period before pregnancy. The health of women in this period is important for conception and healthy births. Particular unhealthy behaviors and experiences before pregnancy can put mother and child at risk for adverse birth and health outcomes.

Concerning the preconception period, the NM PRAMS survey assessed the following indicators: folic acid awareness, multivitamin use, unintended and unwanted pregnancy, contraception use, pre-pregnancy weight and diabetes, alcohol and tobacco use, and physical abuse.

The data collected here identify four major health areas in the preconception period that we can work to improve: 1) contracep-

tion use/unintended pregnancy, 2) multivitamin use, 3) pre-pregnancy weight, and 4) diabetes.

Key findings from the following tables include:

- A high prevalence of mothers did not use **contraception** at conception. Sixty-five percent of mothers who said they were not trying to get pregnant were not using contraception.
- **Unintended Pregnancy.** Over half of mothers (54%) did not intend to get pregnant. Mothers who were younger and unmarried were more likely to report an unintended pregnancy.
- Low **multivitamin use** during the month before pregnancy.

Sixty-one percent of mothers did not take a multivitamin or prenatal vitamin; only 25% took a multivitamin at least 4 times per week during the month before pregnancy.

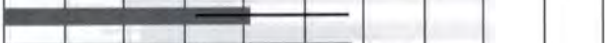
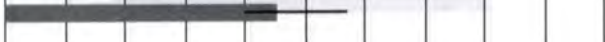
- **Overweight.** The data indicate 54.5% of mothers' BMI was too high. The mothers more likely to be overweight were older, married, and had had other children.
- Twelve percent of mothers reported having **pre-existing or gestational diabetes**. Women who were married, older, and had more education were significantly more likely to have diabetes.

Preconception multivitamin use

Maternal characteristic

Percent of mothers who took a multivitamin or prenatal vitamin at least 4 times per week during the month before pregnancy

2000-2004

	0	5	10	15	20	25	30	35	40	45	50	Percent	Lower	Upper
All NM Navajo mothers (N=585)												25.1	21.6	28.8
Age														
<20												22.1	14.5	32.1
20-24												21.7	16.3	28.2
25-34												28.7	23.3	34.9
35+												25.8	16.6	37.9
Education														
Less than high school												24.2	17.7	32.1
High school												25.2	20.3	30.9
More than high school												26.3	20.0	33.7
Marital status														
Married												28.7	21.9	36.5
Not married												23.8	20.0	28.2
Any previous live birth														
No												22.9	17.6	29.3
Yes												26.4	22.1	31.3
Residence														
McKinley/SanJuan Counties												25.8	21.9	30.1
Other NM Counties												22.8	16.2	31.1
Public assistance														
No												24.9	20.8	29.5
Yes												25.0	19.2	31.8
Payer of prenatal care														
IHS												24.8	20.3	29.8
Medicaid / not IHS												26.3	20.6	32.9

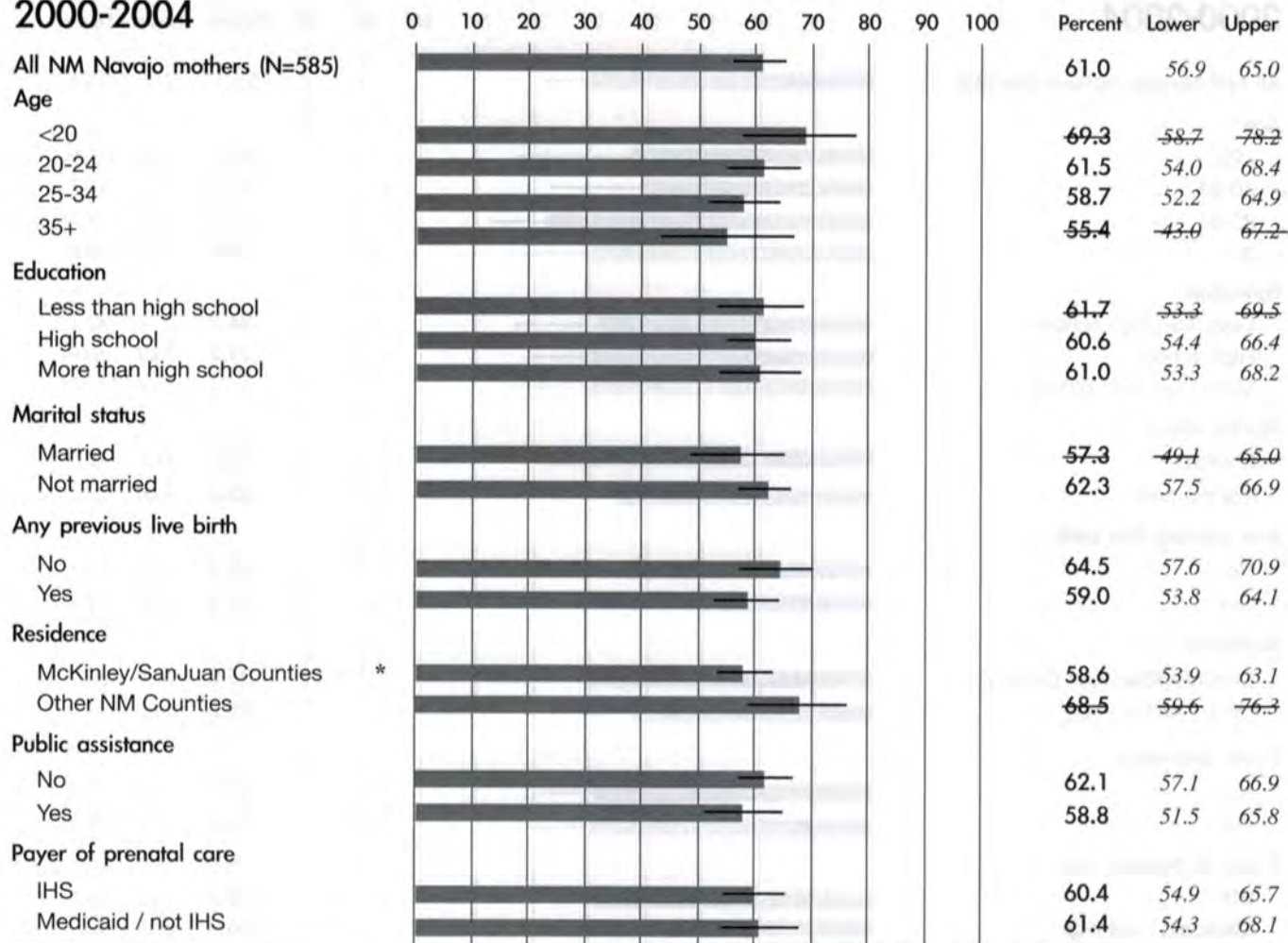
This table shows that only 25% of mothers took a prenatal or multivitamin at least 4 days per week in the month before pregnancy. The table also indicates that this behavior did not vary by the other maternal characteristics shown in the table (e.g., age, education, marital status, etc.).

No preconception multivitamin use

Maternal characteristic

Percent of mothers who did not take a multivitamin or prenatal vitamin during the month before pregnancy

2000-2004



* p < 0.05

This table shows that 61% of mothers did not take a multi- or prenatal vitamin before conception. Most other maternal characteristics listed above (age, education, marital status, etc.) did not have a measurable impact on whether or not mothers

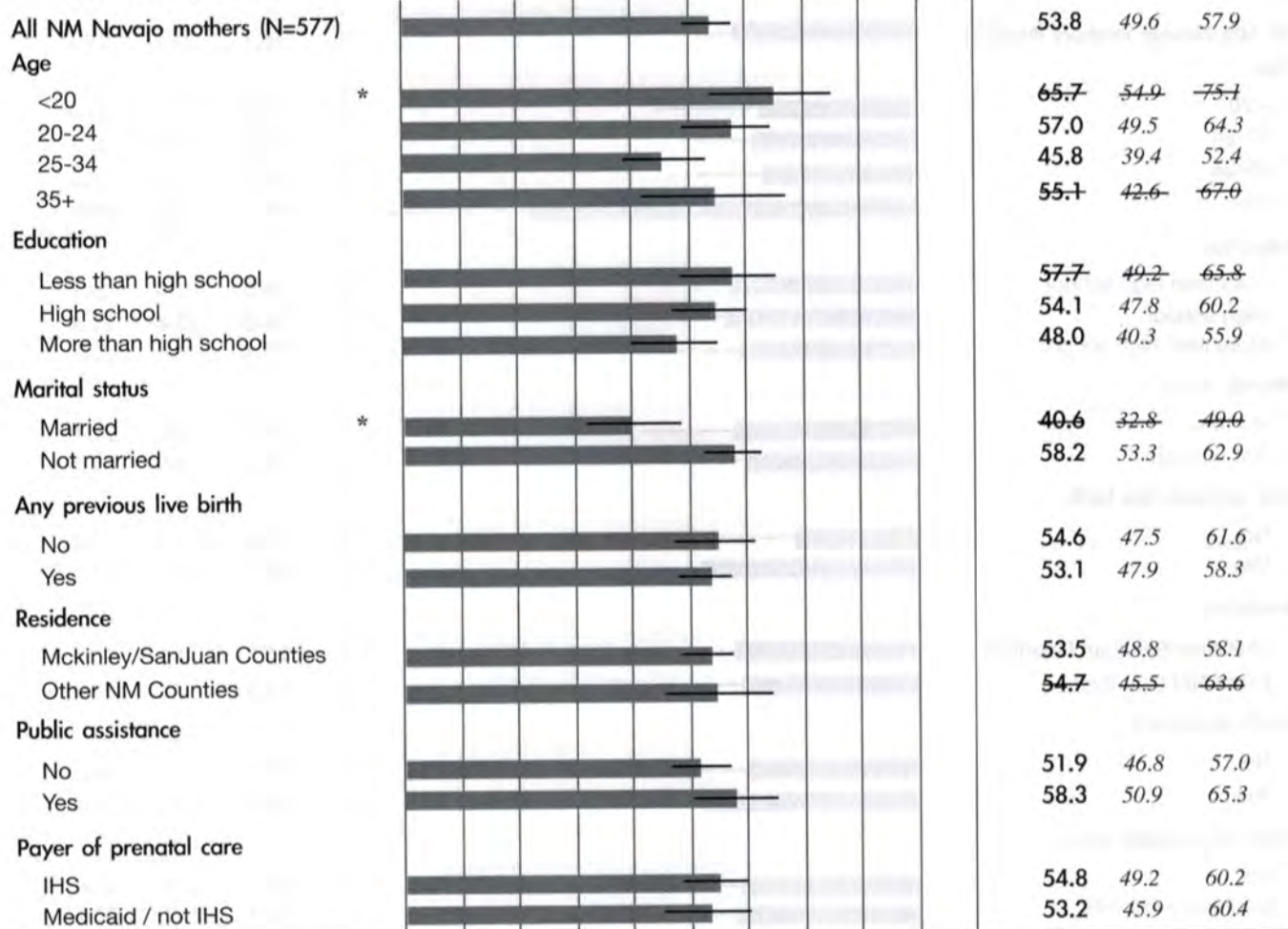
took vitamins during the month before pregnancy. However, mothers living in McKinley or San Juan Counties were statistically significantly less likely to take vitamins before conception.

Unintended pregnancy resulting in live birth

Maternal characteristic

Percent of mothers who wanted to be pregnant at a later time or not at all

2000-2004



* $p < 0.05$

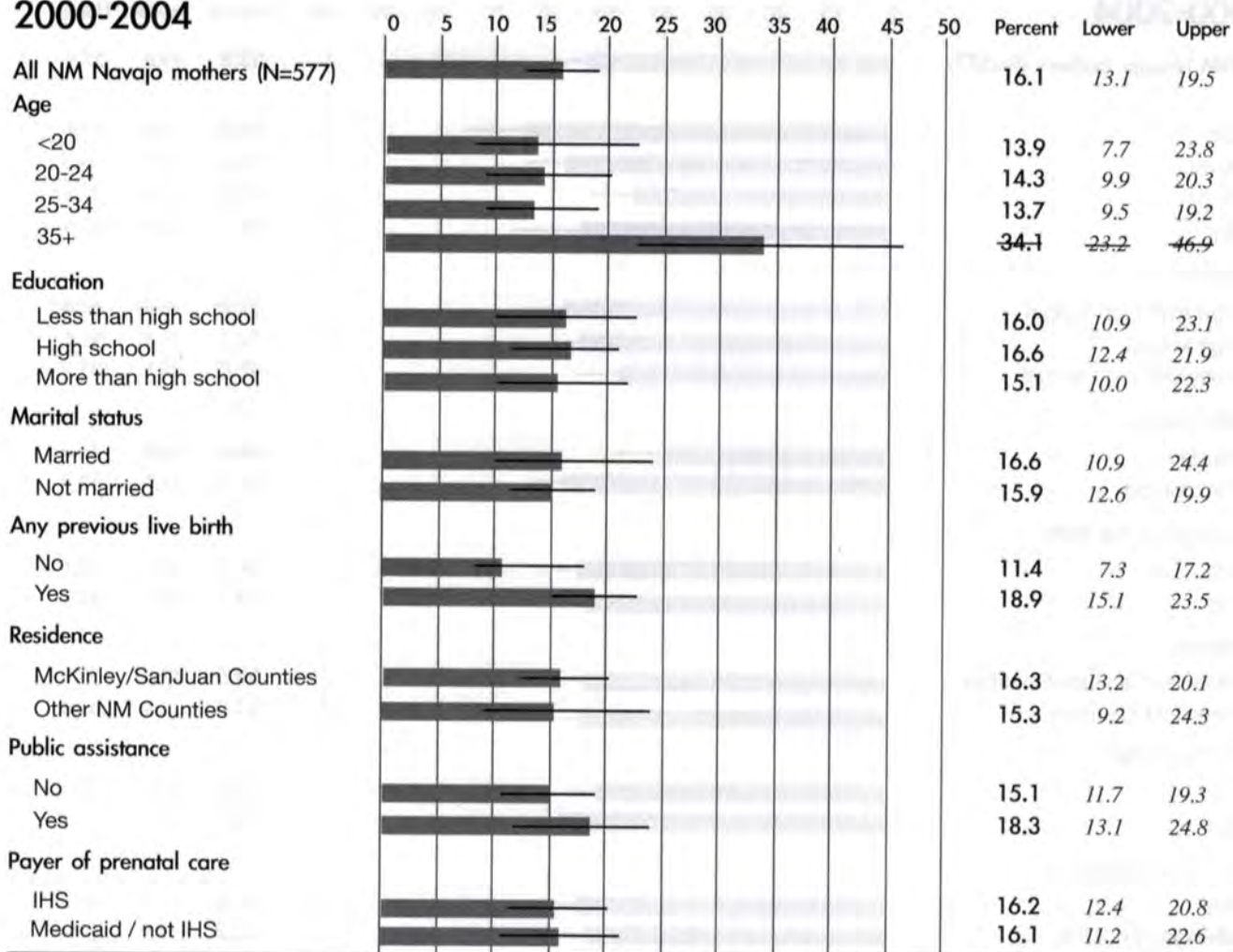
Regarding pregnancy intention, this table shows that 54% of mothers wanted their pregnancy later or not at all, which is categorized as an "unintended pregnancy." The table shows that the younger the mother, the more likely she was to have had an unintended pregnancy. In addition, mothers who were unmarried were significantly more likely to have had unintended pregnancy.

Unwanted Pregnancy

Maternal characteristic

Percent of mothers who did not want to be pregnant then or at any time in the future

2000-2004



In the previous table on “unintended pregnancy,” mothers indicated wanting to be pregnant later or not at all. In this table on “unwanted pregnancy,” mothers indicated *not* wanting to be pregnant then or at any time in the future. According to this table, 16% of mothers said their pregnancy was unwanted. Although mothers age 35 and older appeared to be more likely to have had unwanted pregnancies, the association between age and unwanted pregnancy was not found to be statistically significant. Conse-

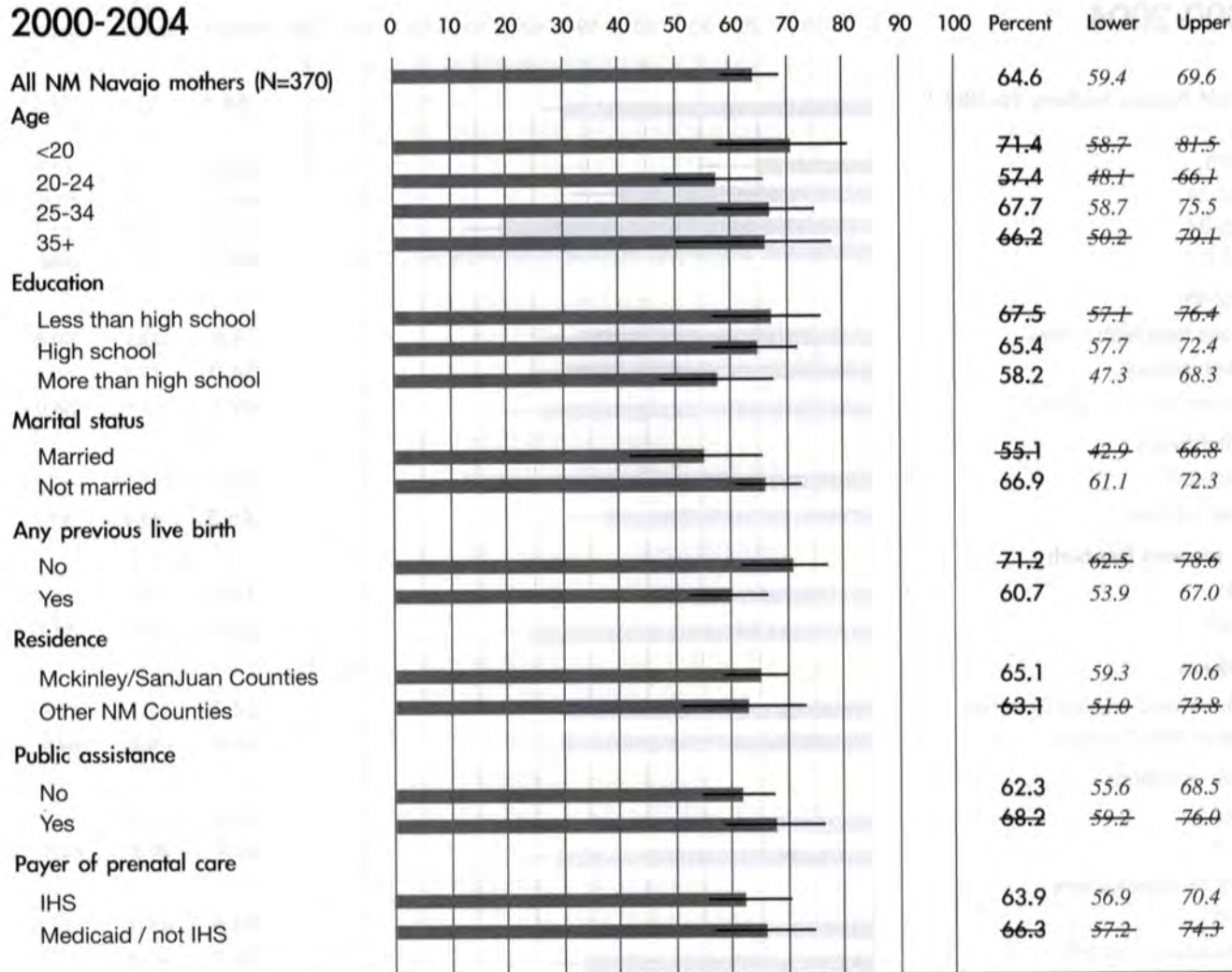
quently, none of the characteristics listed above (e.g., age, education, marital status) predicted whether or not women had an unwanted pregnancy.

Not using contraception

Maternal characteristic

Among mothers who said they were not trying to get pregnant, percent who were not using contraception at conception

2000-2004



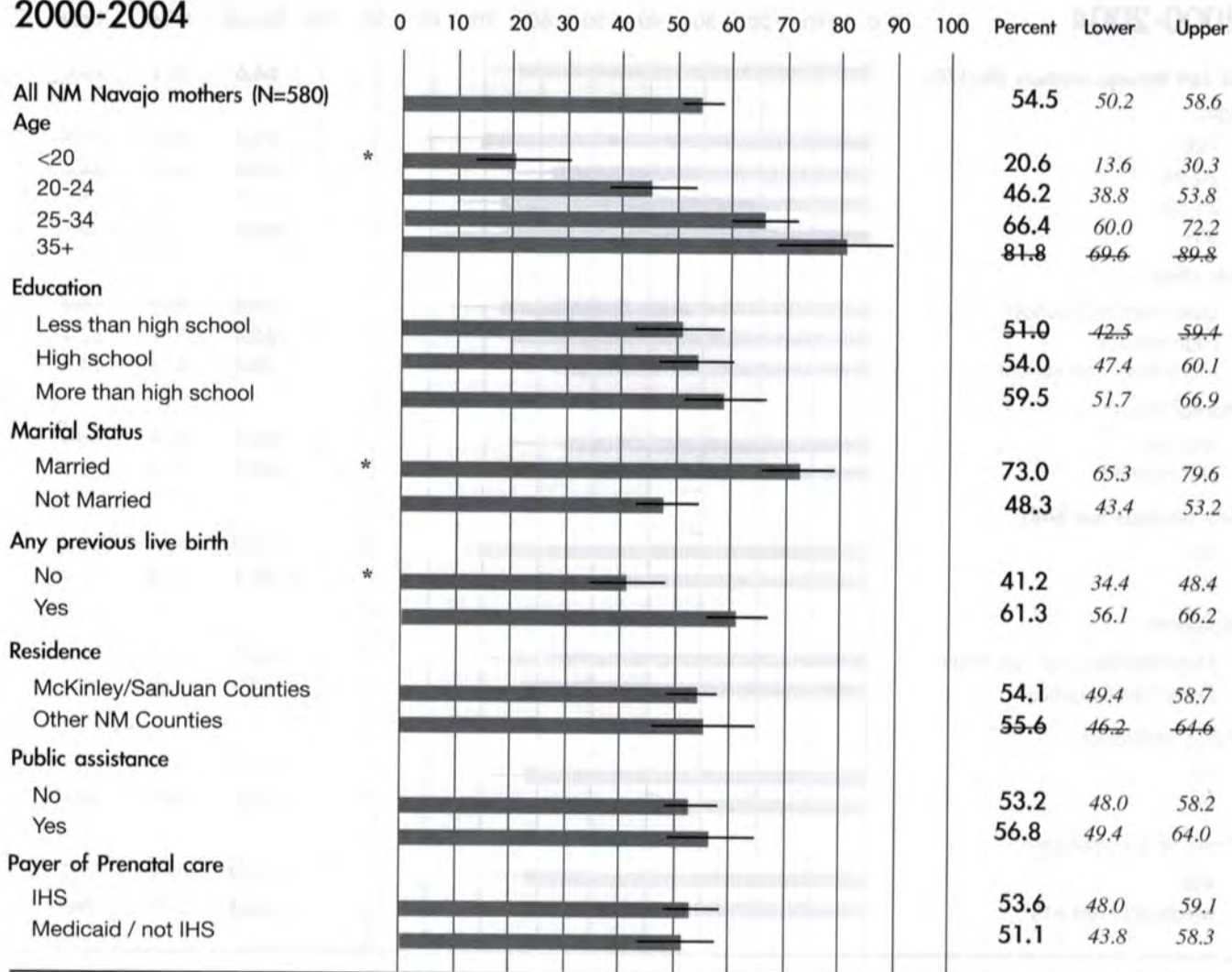
Among mothers who would have liked to delay their pregnancy, 65% were not using any method of contraception when they became pregnant. Women who were married or had other children (i.e., a previous live birth) were somewhat more likely to use contraception. However, the associations between lack of contraceptive use and these two factors were not statistically significant.

Overweight during preconception

Maternal characteristic

Percent of mothers whose BMI (Body Mass Index) was above a healthy range

2000-2004



* p < 0.05

Fifty-four percent of women reported being overweight before pregnancy. Women were statistically significantly more likely to be overweight if they were older, married, or had had other children ("any previous live birth").

Diabetes

Maternal characteristic

Percent of mothers with pre-existing or gestational diabetes

2000-2004

All NM Navajo mothers (N=580)

Age

<20	*	5.7	2.2	13.9
20-24		6.2	3.4	10.9
25-34		18.0	13.4	23.7
35+		15.5	8.4	26.8

Education

Less than high school	*	10.5	6.3	17.1
High school		9.4	6.4	13.6
More than high school		18.4	12.8	25.6

Marital Status

Married	*	19.4	13.5	27.1
Not Married		9.5	7.0	12.9

Any previous live birth

No		10.2	6.5	15.7
Yes		12.9	9.8	16.9

Residence

McKinley/SanJuan Counties		11.5	8.8	14.8
Other NM Counties		13.6	8.2	21.7

Public assistance

No		11.2	8.2	15.1
Yes		13.9	9.7	19.5

Payer of Prenatal care

IHS		10.8	7.8	14.6
Medicaid / not IHS		14.1	9.6	20.3

* p < 0.05

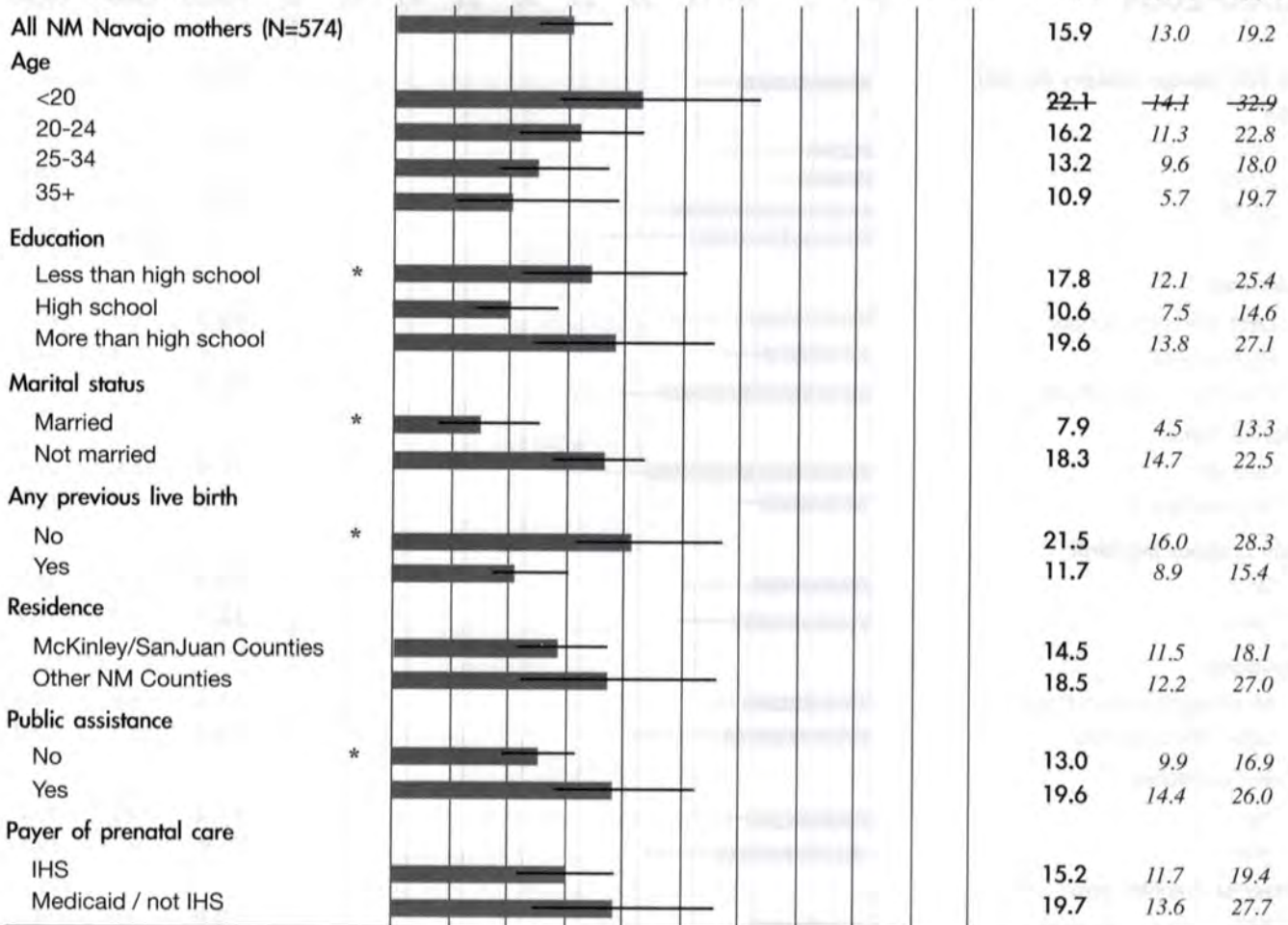
Pre-existing or gestational diabetes was statistically significantly higher among mothers who were married, had more education, or were older. Overall, 12% of mothers had pre-existing or gestational diabetes.

Frequent or binge alcohol use in the 3 months before pregnancy

Maternal characteristic

Percent of mothers who had 5+ drinks in one sitting or drank 7 or more times per week

2000-2004



* $p < 0.05$

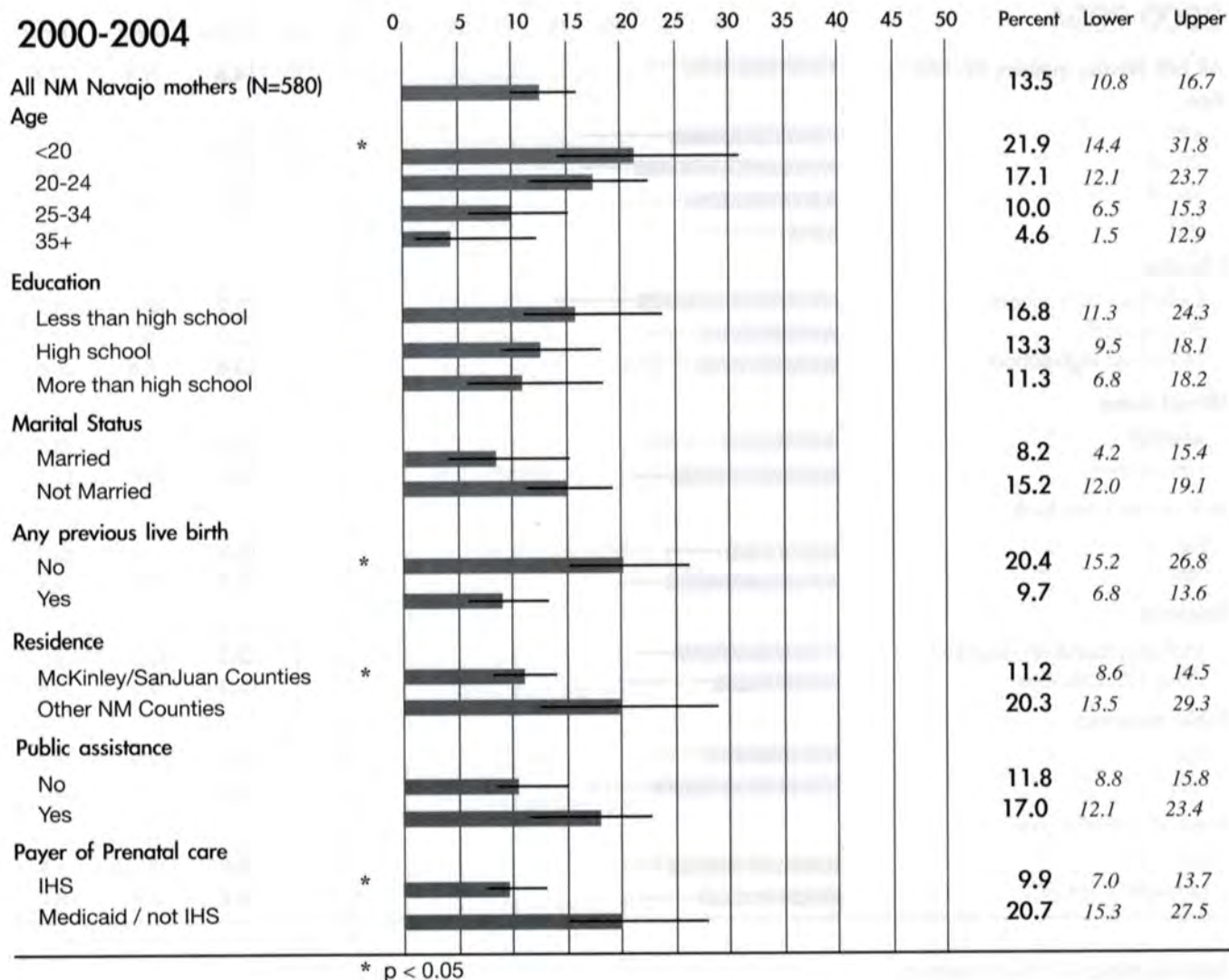
Sixteen percent of women reported that they were frequent or binge alcohol drinkers before becoming pregnant. Women who were unmarried, first time mothers, or on public assistance were statistically significantly more likely to drink frequently or binge drink.

Cigarette smoking in the 3 months before pregnancy

Maternal characteristic

Percent of mothers who smoked cigarettes before they were pregnant

2000-2004



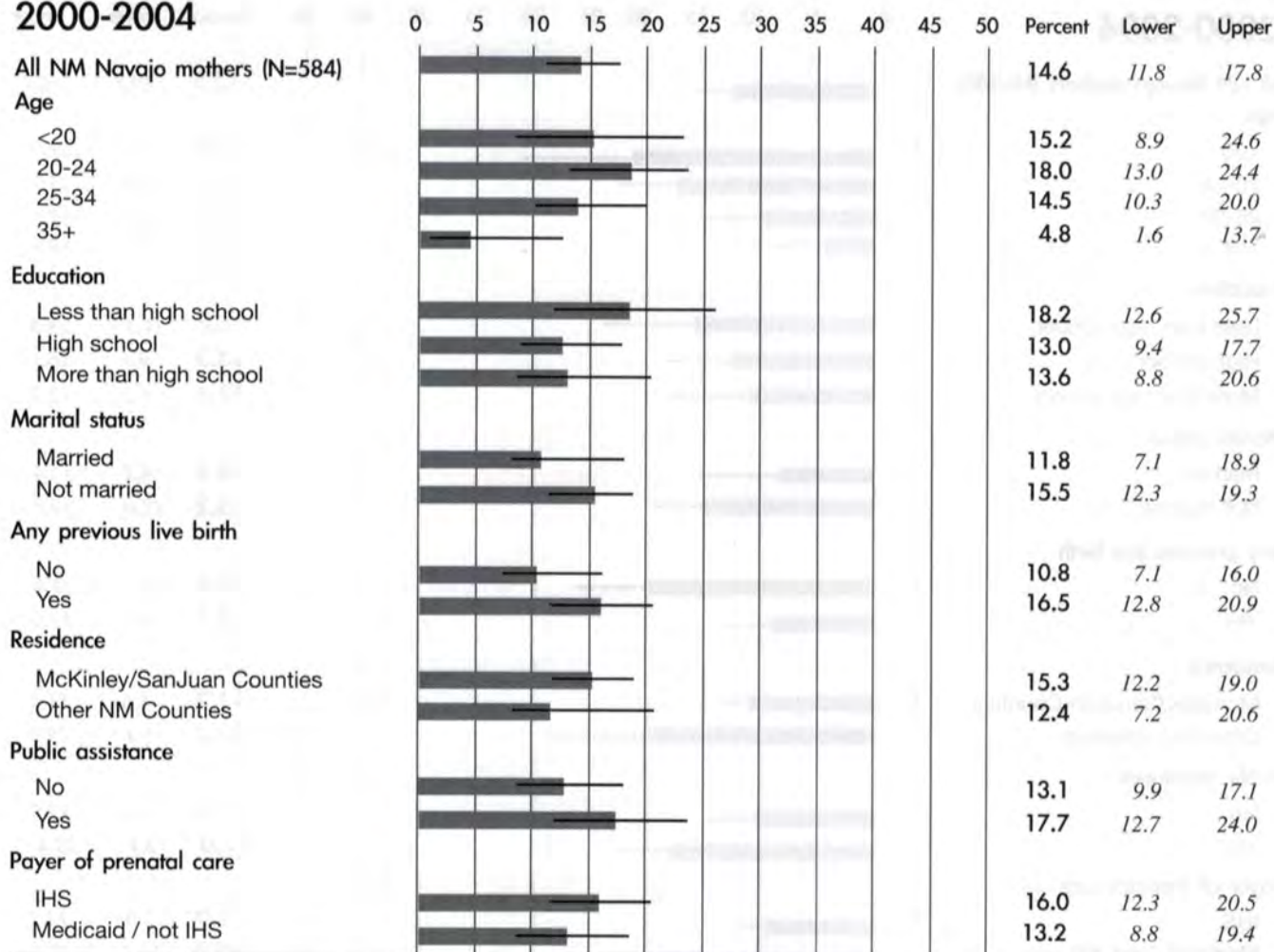
Approximately 14% of mothers smoked before becoming pregnant. This table shows that several factors significantly affected women's smoking behavior before pregnancy. Women were more likely to smoke if they were younger, lived in counties other than McKinley or San Juan, had no previous live birth, or had Medicaid coverage.

Physical Abuse by husband or partner in the year before pregnancy

Maternal characteristic

Percent of mothers who were slapped, hit, kicked, punched, or choked

2000-2004



Approximately 15% of women were physically abused by a husband or partner in the year before pregnancy. Although it appears that women were more likely to be abused if they were younger than age 35, this factor was not found to be statistically significant.

PRENATAL



This section describes behaviors and experiences during pregnancy. The NM Navajo mothers' data in this survey identified five areas of concern during the prenatal period: prenatal care, oral health, physical abuse, awareness of folic acid and multivitamins, and use of support services.

Key findings from the following tables include:

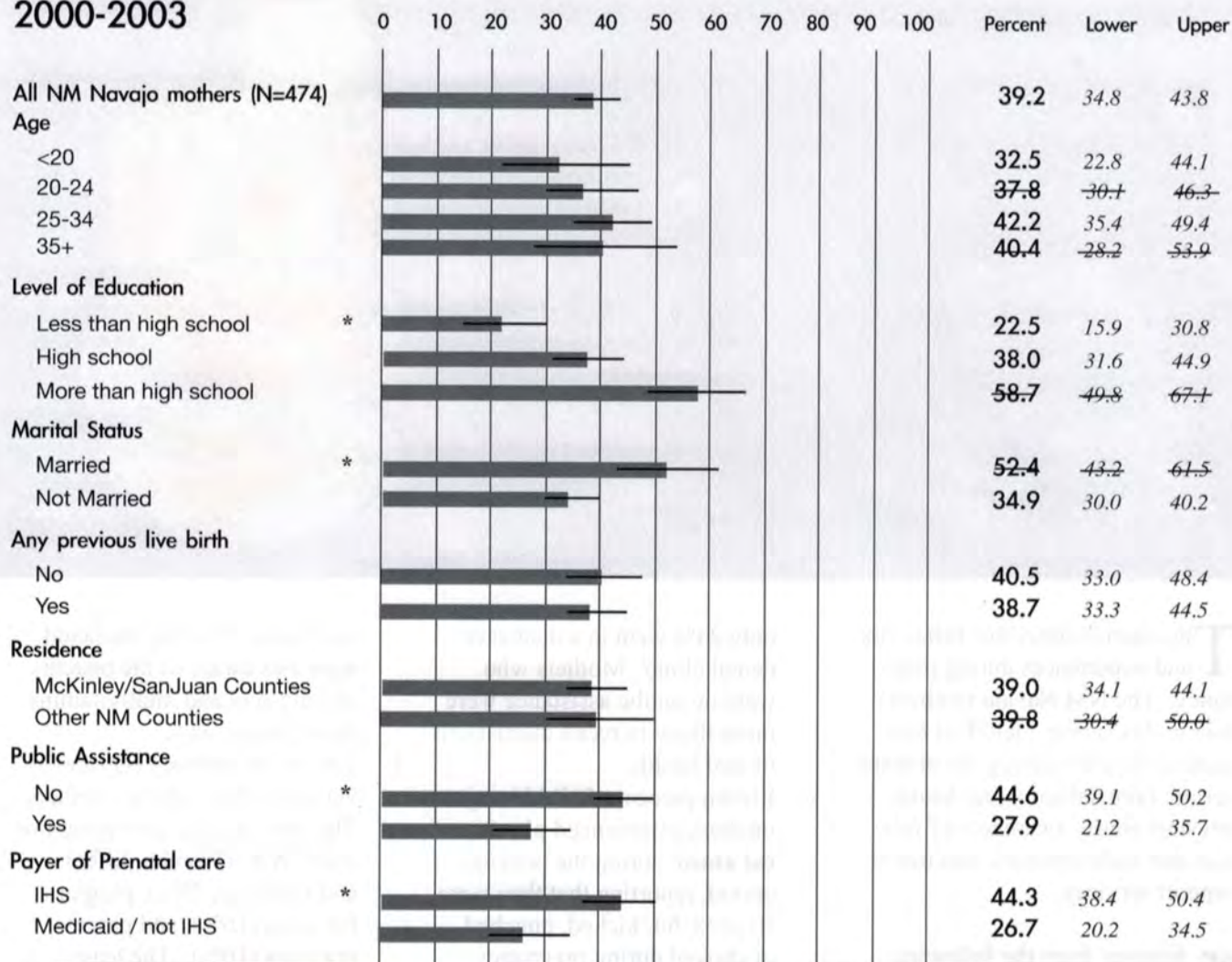
- Only 37% received adequate **prenatal care**. Mothers with less education were less likely to seek timely prenatal care.
- Low prevalences of both discussion of and seeking **oral health** services were reported. Only 29% of mothers recalled that a health care worker talked about oral care during pregnancy; only 24% went to a dentist or dental clinic. Mothers who were on public assistance were more likely to recall discussions of oral health.
- Eleven percent of NM Navajo mothers experienced **physical abuse** during the prenatal period, reporting that they were slapped, hit, kicked, punched, or choked during pregnancy. Yet only 3% participated in violence protection programs. Mothers under age 20 reported the highest percentage of physical abuse.
- Nearly two-thirds (61%) of NM Navajo mothers were not aware of the importance of **folic acid and multivitamins** during pregnancy. Mothers who had less education, were not married, were using public assistance, or using Medicaid were less aware of the benefits of folic acid and multivitamins during pregnancy.
- The use of **support services** varied for NM Navajo mothers. The most widely used programs were: WIC (Women, Infant, and Children, 70%), programs for teens (16%), and parenting class (16%). The least used programs were: smoking cessation (0.7%), programs to stop using drugs and alcohol (2%), and programs for protection from family violence (3%). These data may indicate lost opportunities to increase the safety and health of mothers and their infants.

Awareness of folic acid and multivitamins during pregnancy

Maternal characteristic

Percent of mothers who were aware of the importance of folic acid and multivitamins (Phase 4 question ended 2003)

2000-2003



* $p < 0.05$

Folic acid is a B-vitamin. Taking a multivitamin containing folic acid before pregnancy can help prevent Neural Tube Defect (NTD), a birth defect characterized by malformations of the spine and brain.

According to this table, from 2000-2003 only 39% of women were aware of the benefits of taking folic acid and multivitamins to prevent birth defects.

Women who were married, had more education, were not on public assistance or had IHS health coverage were significantly more likely to be aware of the importance of these vitamins during pregnancy.

Late (after 1st trimester) or no prenatal care

Maternal characteristic

Percent of mothers with no prenatal care or with prenatal care starting after the first trimester (as calculated on the NM birth certificate)

2000-2004

All NM Navajo mothers (N=568)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public Assistance

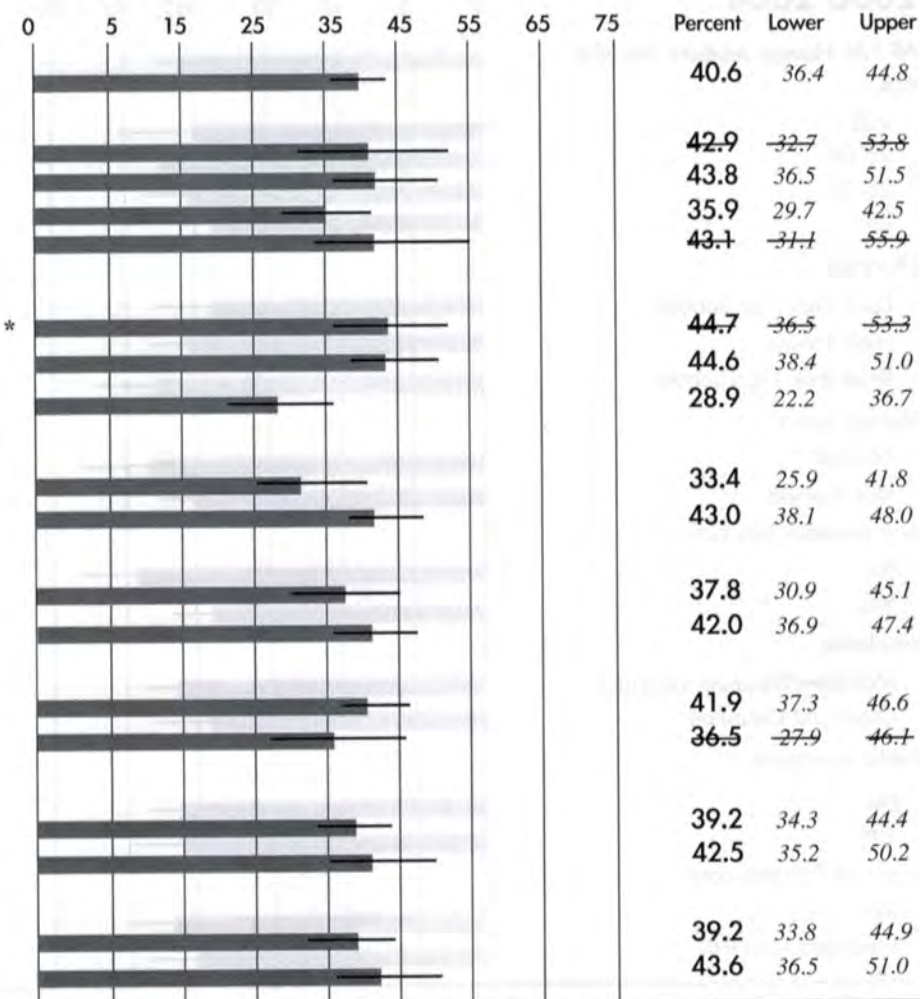
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* p < 0.05

Approximately 41% of women received prenatal care after the 1st trimester or received no prenatal care at all

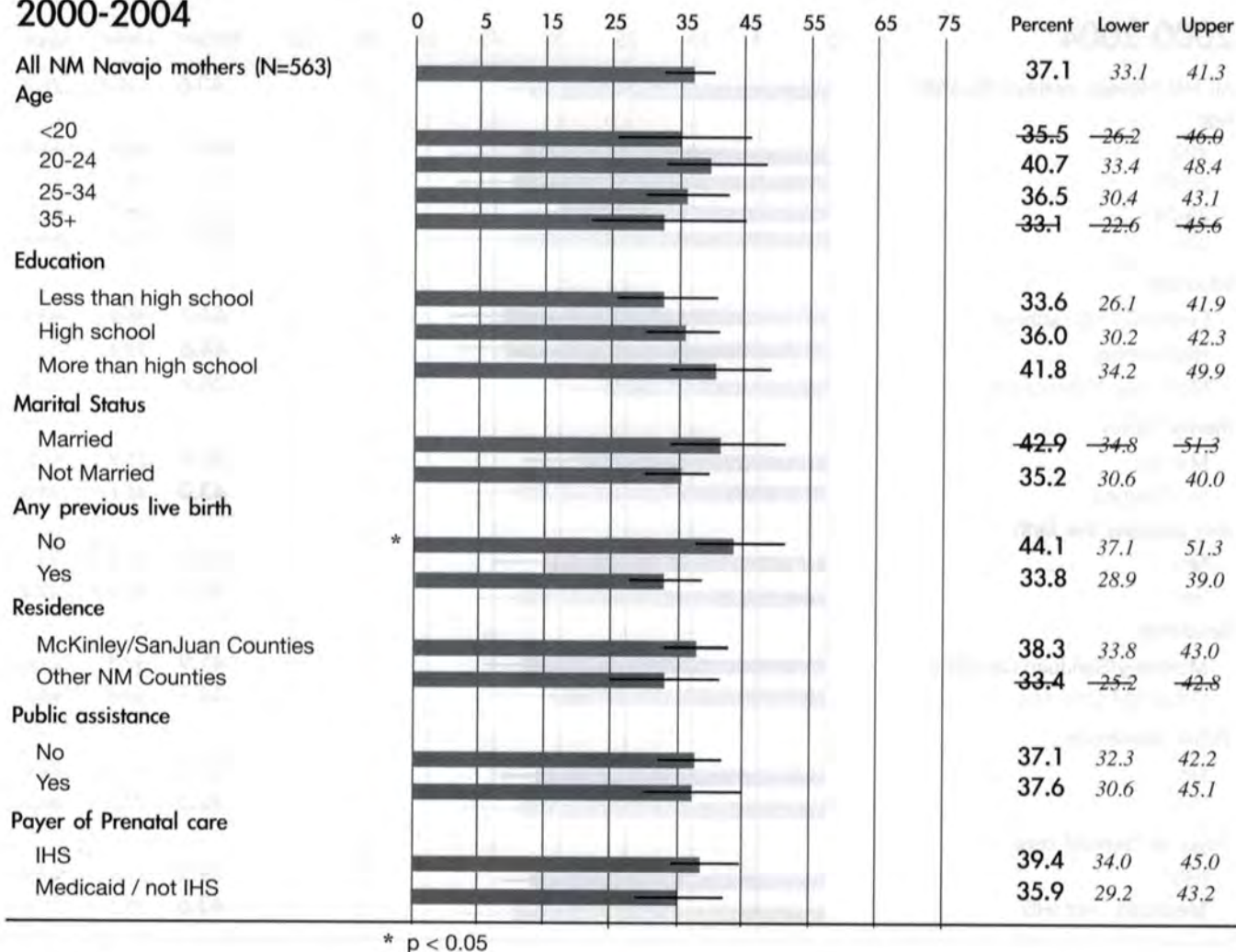
Women with less education were significantly more likely to obtain late or no prenatal care.

Adequate prenatal care (Kotelchuck Index)

Maternal characteristic

Percent of mothers who received an adequate level of prenatal care

2000-2004



Only 37% of mothers received adequate prenatal care according to the Kotelchuck Index, which is a ratio of actual to recommended number of visits based upon the infant's gestational age at delivery (see Definition of Factors on page 9). First-time mothers were statistically significantly more likely to receive adequate prenatal care (44%).

Alcohol use in last trimester of pregnancy

Maternal characteristic

Percent of mothers who had one or more drinks during the last three months of pregnancy

2000-2004

All NM Navajo mothers (N=580)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital status

Married

Not married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

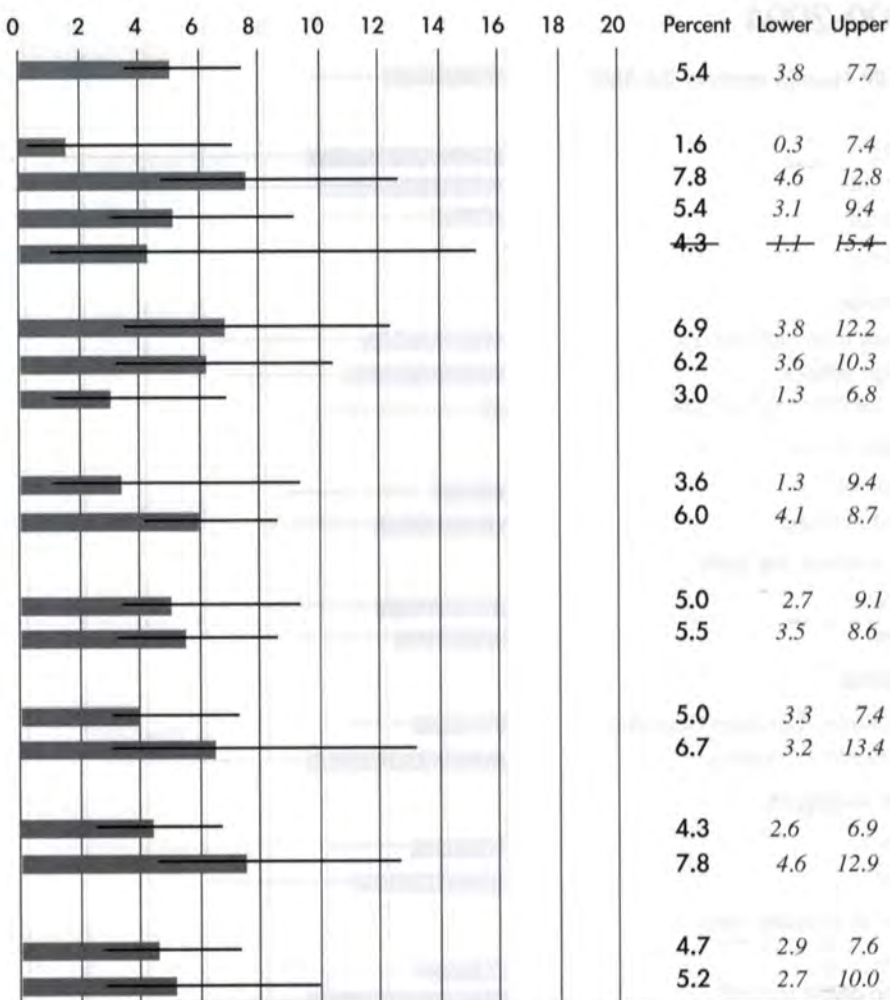
No

Yes

Payer of prenatal care

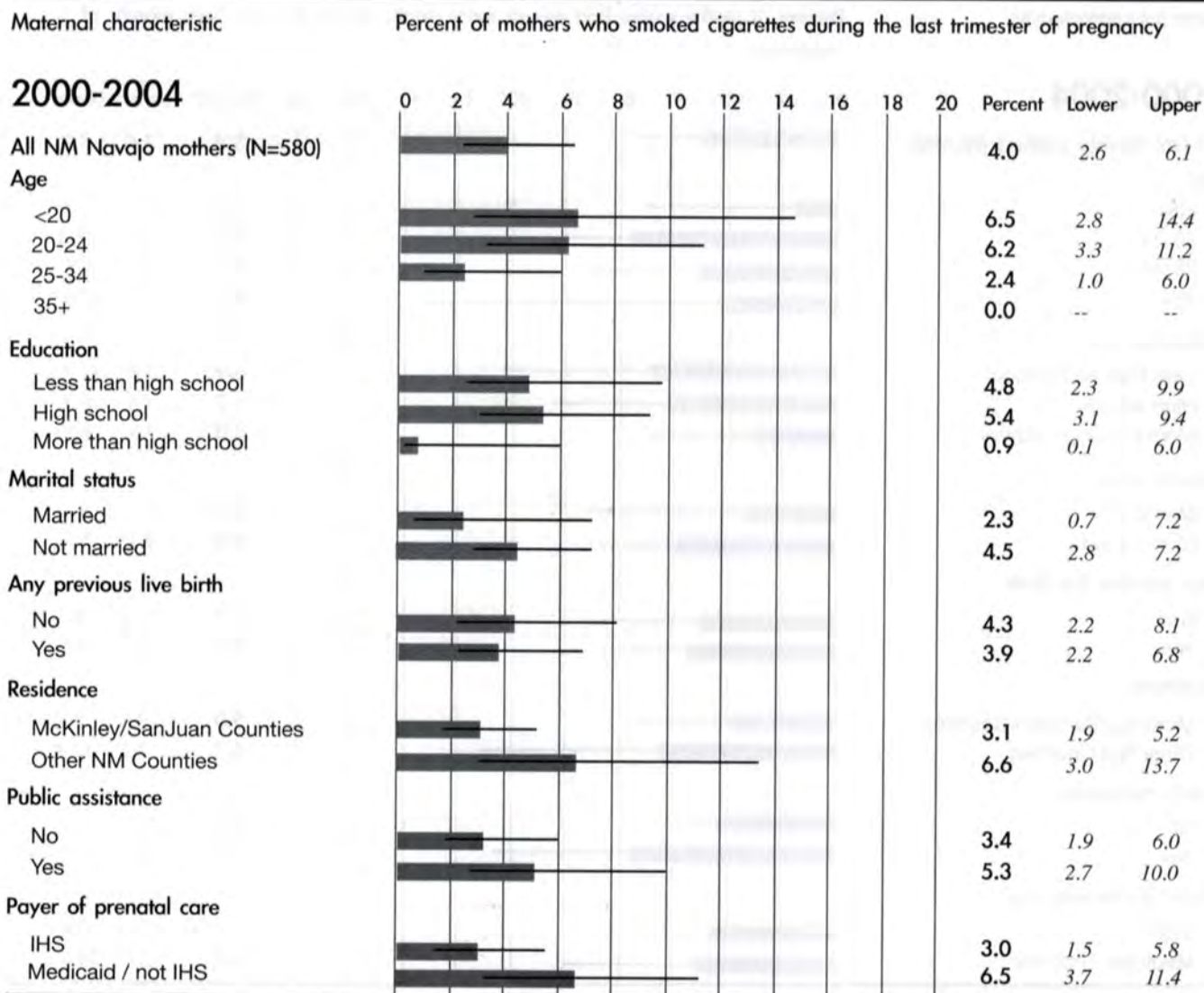
IHS

Medicaid / not IHS



Five percent (5.4%) of women said they consumed alcohol during the last three months of pregnancy. The number of women reporting alcohol use here was small. Consequently, it is not surprising that no other factors were found to be statistically significant in this table.

Cigarette smoking in last trimester of pregnancy



Four percent of women reported smoking cigarettes during their last trimester of pregnancy. None of the factors in this table were found to be associated with cigarette use during this time of pregnancy.

Physical Abuse by husband or partner during pregnancy

Maternal characteristic

Percent of mothers who were slapped, hit, kicked, punched, or choked during pregnancy

2000-2004

All NM Navajo mothers (N=584)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital status

Married

Not married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

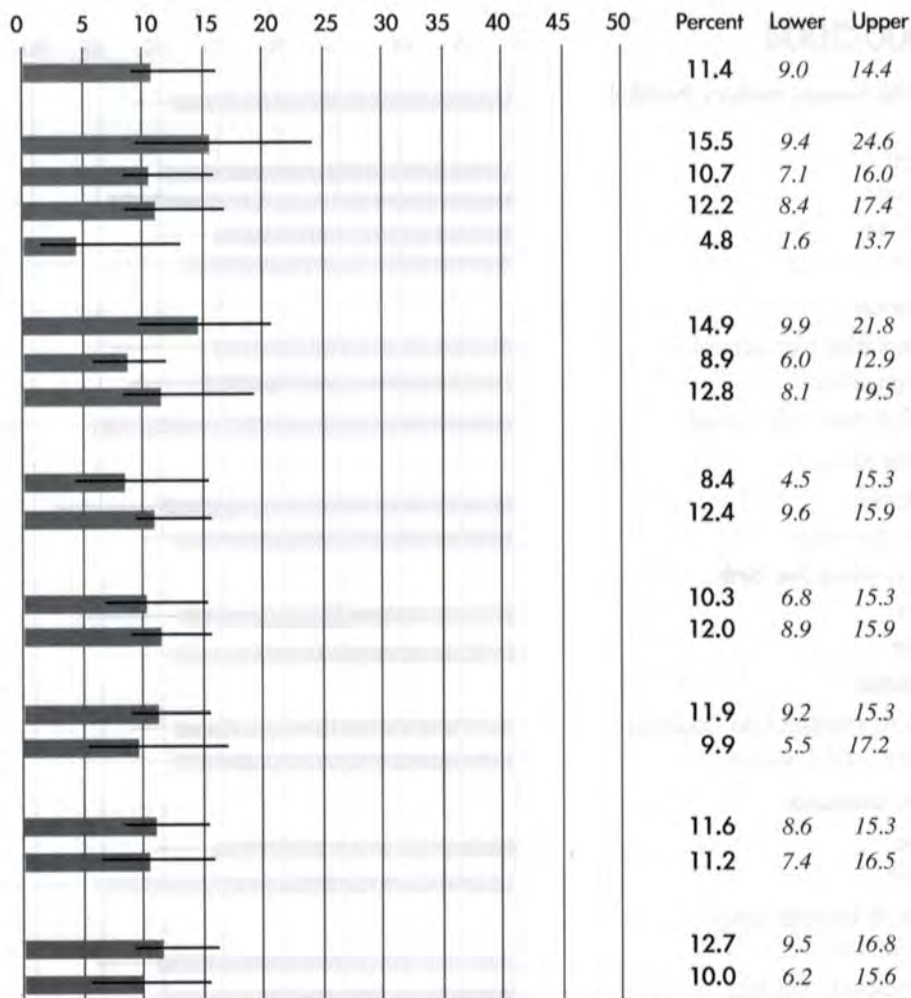
No

Yes

Payer of prenatal care

IHS

Medicaid / not IHS



Eleven percent of women reported that they were physically abused by their husband or partner during pregnancy. A higher proportion of younger women experienced physical abuse compared with older women, although age was not found to be statistically significant.

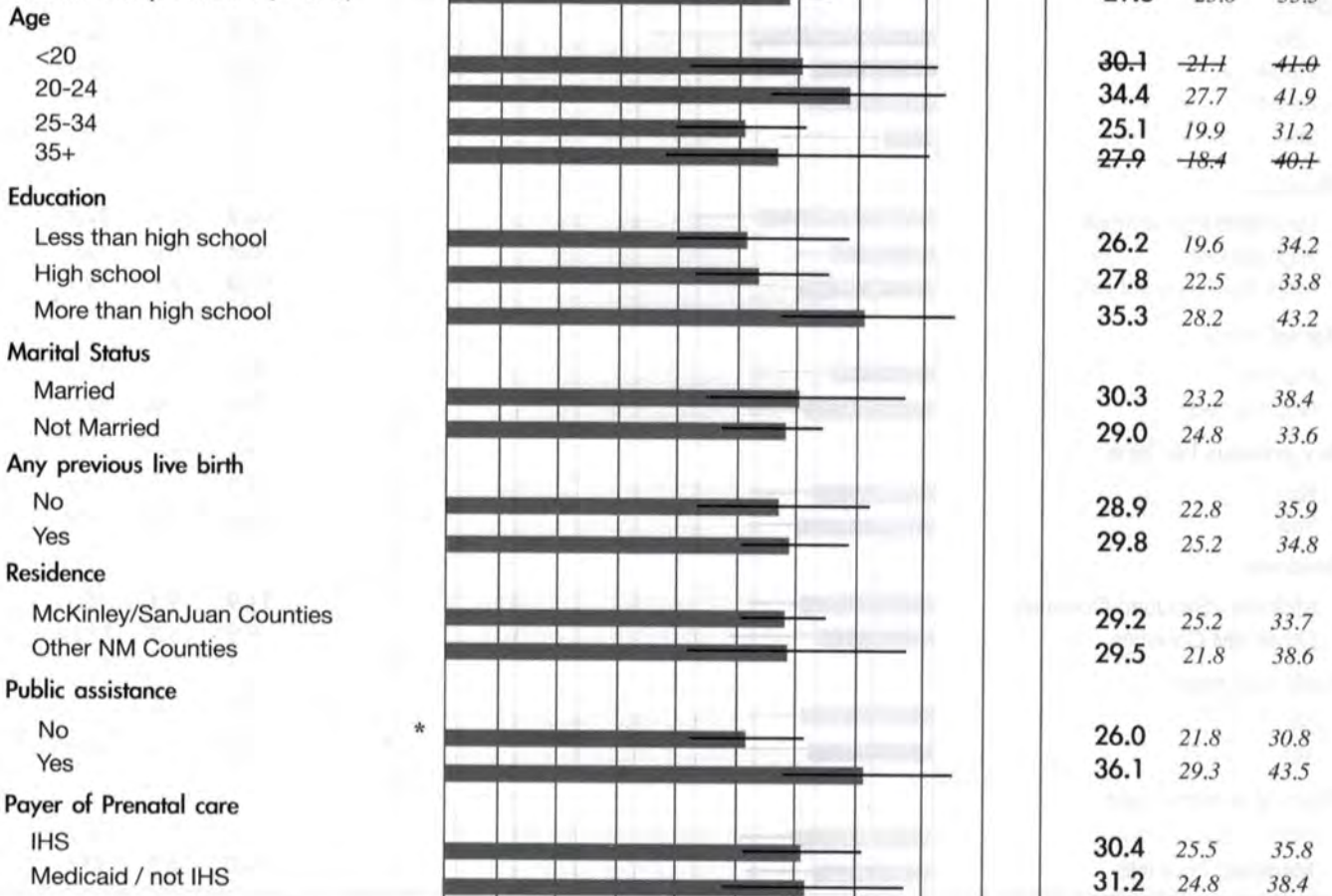
Oral health discussion during pregnancy

Maternal characteristic

Percent of mothers who recalled that a health care worker talked about care of teeth and gums during pregnancy.

2000-2004

All NM Navajo mothers (N=583)



* p < 0.05

Twenty-nine percent of mothers recalled discussion with a health care worker about how to care for their teeth and gums during pregnancy.

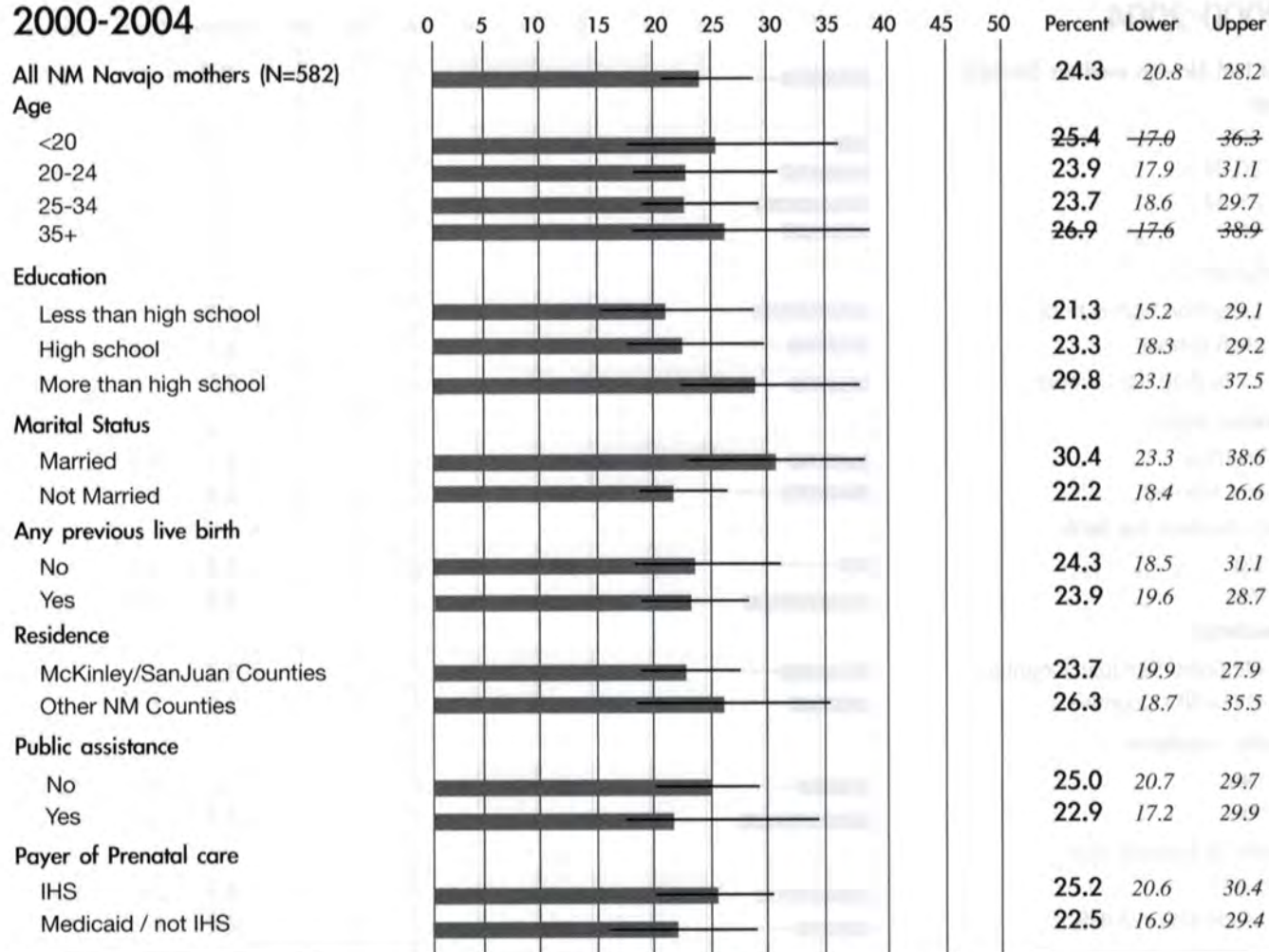
Women on public assistance were statistically significantly more likely to report such discussions.

Oral health service during pregnancy

Maternal characteristic

Percent of mothers who went to a dentist or dental clinic during pregnancy

2000-2004



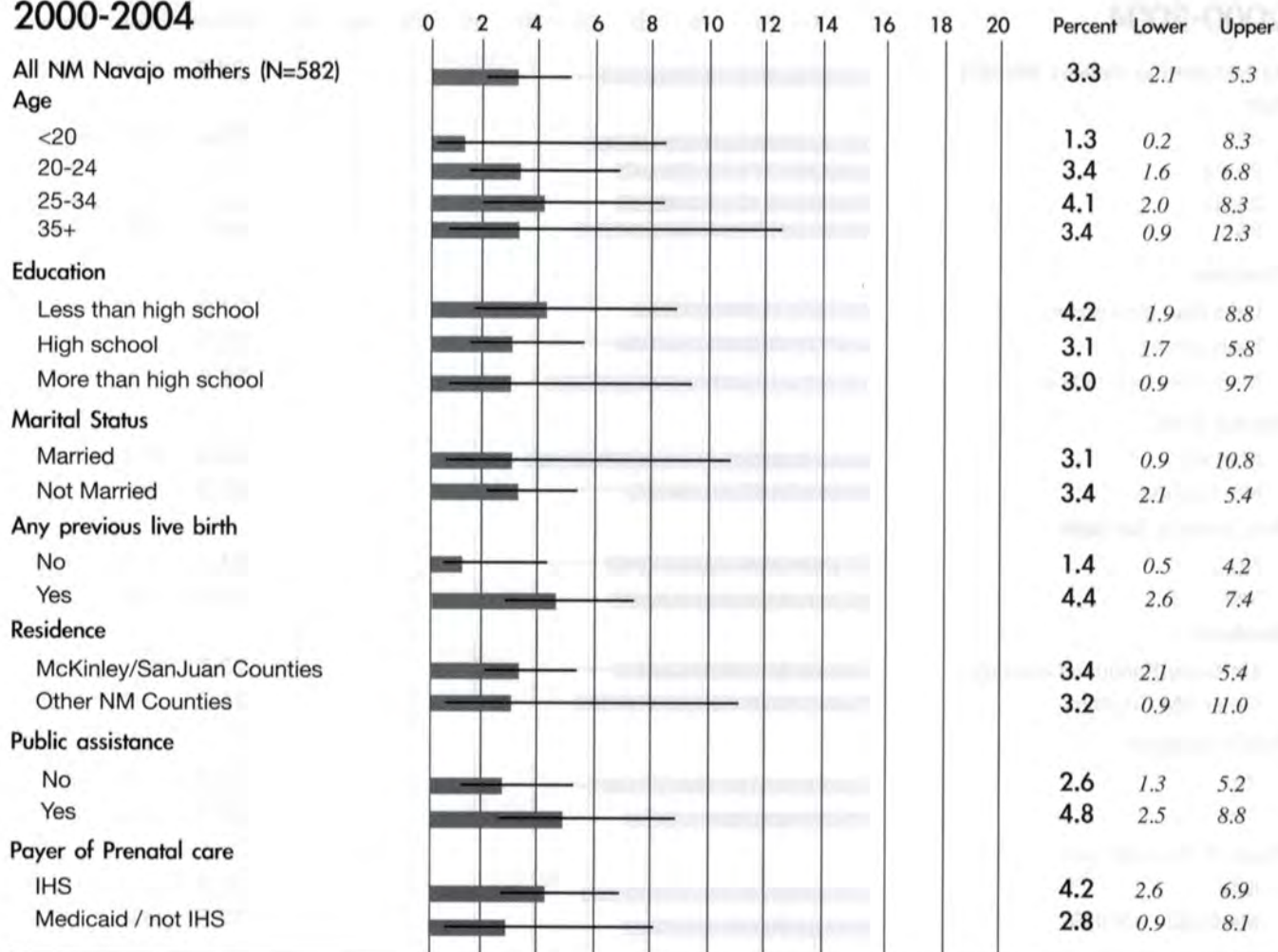
Twenty-four percent of mothers reported that they went to a dentist or dental clinic during pregnancy. This table and the previous one show that more education is needed around the importance of dental health during pregnancy.

Program for protection from family violence during pregnancy

Maternal characteristic

Percent of mothers who participated in violence protection services

2000-2004



If women are experiencing violence, they need support to seek protection against violence before, during, and after pregnancy. Only 3% of NM Navajo women said they participated in a program that provided protection from family violence during pregnancy.

Breastfeeding class or support group during pregnancy

Maternal characteristic	Percent of mothers who participated in breastfeeding class/support group during pregnancy									
	0	5	10	15	20	25	30	Percent	Lower	Upper
2000-2004										
All NM Navajo mothers (N=582)								12.7	10.3	15.6
Age										
<20								14.8	8.7	24.1
20-24								12.5	8.6	17.8
25-34								12.5	8.8	17.3
35+								11.6	6.0	21.2
Education										
Less than high school								12.0	7.6	18.6
High school								13.3	9.7	18.0
More than high school								12.5	8.5	18.1
Marital Status										
Married								15.4	10.5	21.8
Not Married								11.8	9.1	15.2
Any previous live birth										
No								15.7	11.4	21.4
Yes								11.3	8.4	14.9
Residence										
McKinley/SanJuan Counties								13.4	10.6	16.8
Other NM Counties								10.5	6.1	17.6
Public assistance										
No								12.8	9.9	16.5
Yes								12.4	8.3	18.0
Payer of Prenatal care										
IHS								12.5	9.5	16.4
Medicaid / not IHS								12.8	8.8	18.3

This table shows that 13% of NM Navajo mothers participated in breastfeeding classes or a support group during pregnancy. None of the factors listed in this table were found to statistically significantly predict which mothers might participate in these support services.

WIC service during pregnancy

Maternal characteristic

Percent of mothers who received prenatal WIC (Women, Infants and Children) Program services

2000-2004

All NM Navajo mothers (N=582)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/San Juan Counties

Other NM Counties

Public assistance

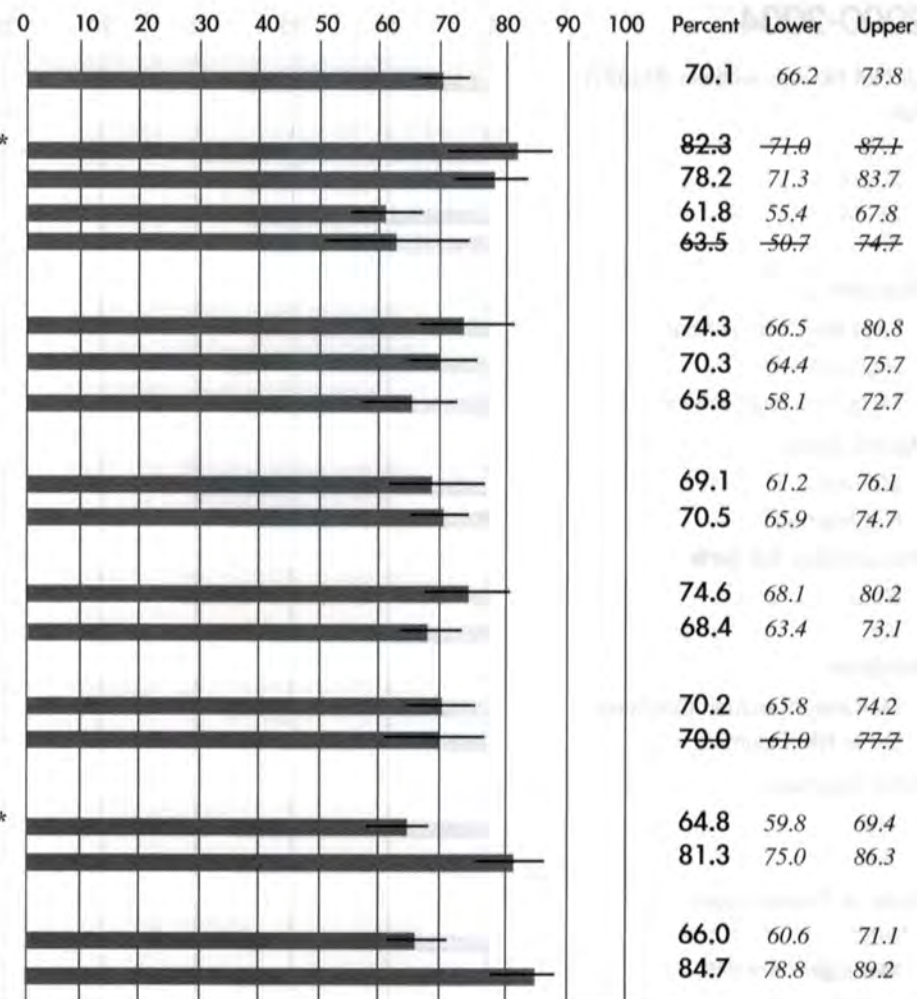
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* $p < 0.05$

Most mothers (70%) received prenatal WIC services. This table shows that younger women and those on public assistance were more likely to receive WIC services; both factors were statistically significant. Women with less education and those with Medicaid health coverage also appeared to be more likely to take advantage of WIC services, although these two factors were not found to be statistically significant.

Parenting class during pregnancy

Maternal characteristic

Percent of mothers who participated in a parenting class during pregnancy

2000-2004

All NM Navajo mothers (N=582)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

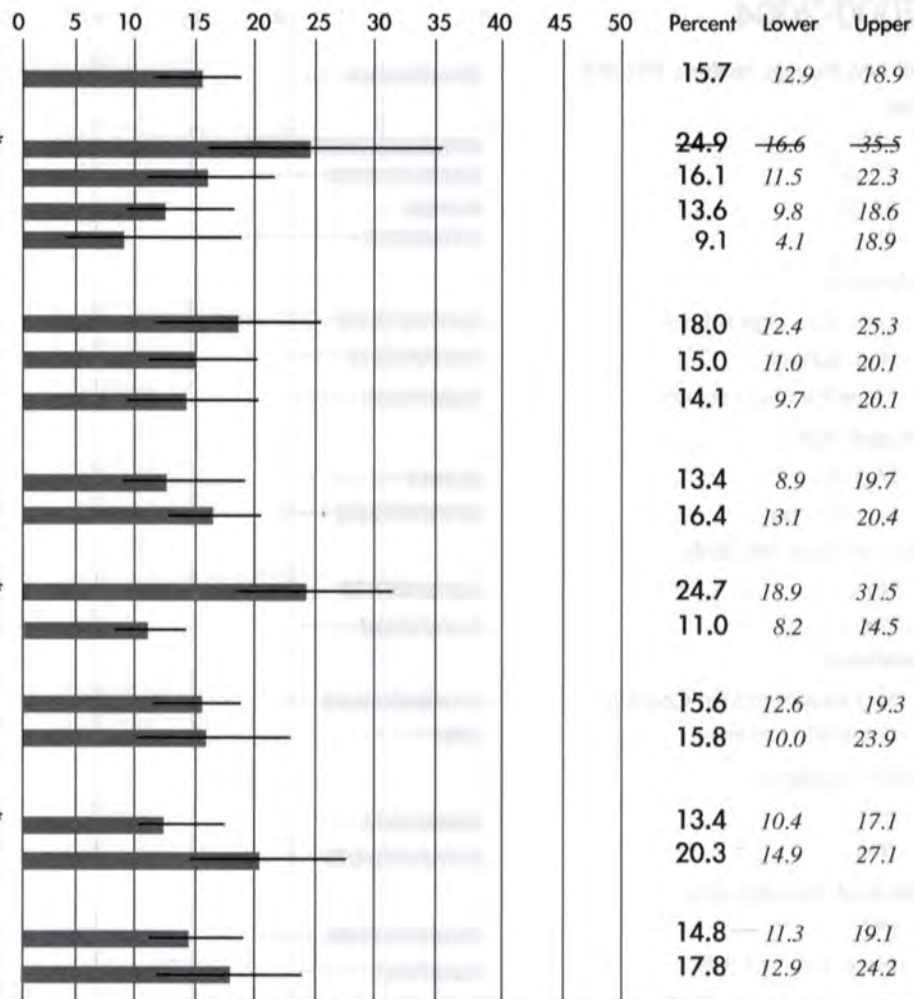
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* $p < 0.05$

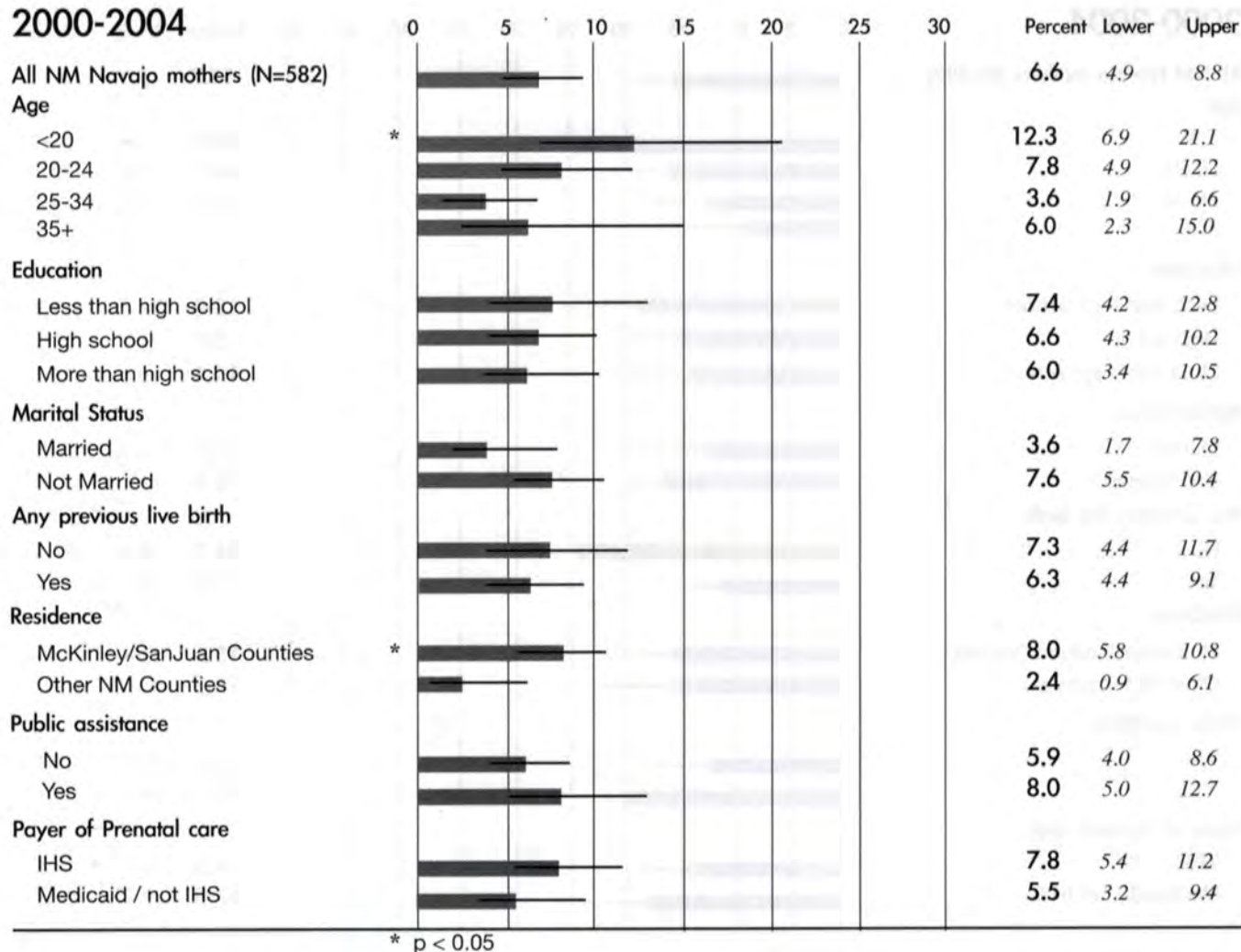
Sixteen percent (15.7%) of NM Navajo mothers participated in a prenatal parenting class. Mothers were more likely to participate in such classes if they were younger, were first-time mothers or were on public assistance. These three factors were found to be statistically significant predictors of participation in parenting classes during pregnancy.

Home visiting services during pregnancy

Maternal characteristic

Percent of mothers who recieved prenatal home visiting services

2000-2004



In this table we see that only 7% of NM Navajo mothers had home visiting services during pregnancy.

Mothers who were younger or who lived in McKinley/San Juan counties were significantly more likely to receive these visits.

Counseling during pregnancy

Maternal characteristic

Percent of mothers who had counseling for a personal or family problem during pregnancy.

2000-2004

All NM Navajo mothers (N=582)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

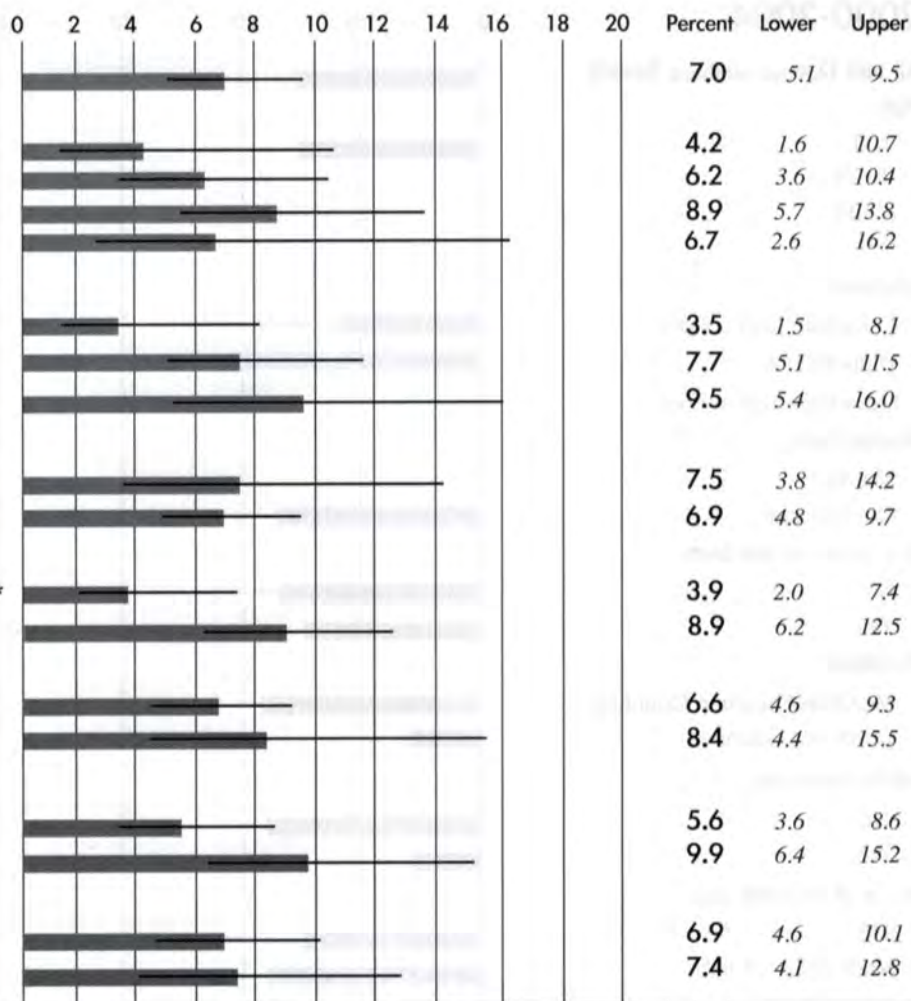
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* $p < 0.05$

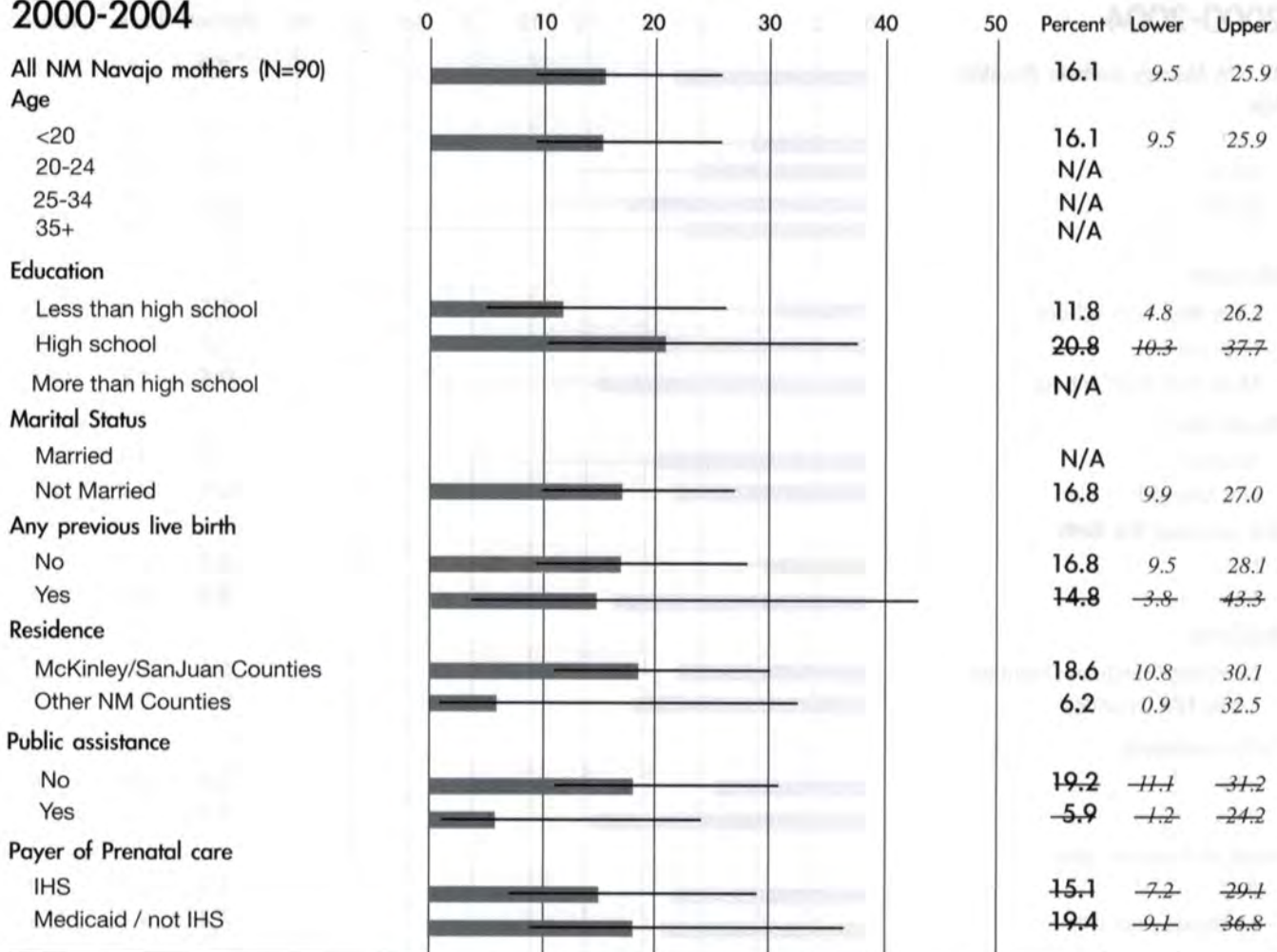
In the area of counseling services, 7% of NM Navajo mothers received counseling for a personal or family problem during pregnancy. Mothers who had other children (i.e., responded "yes" to "any previous live birth") were significantly more likely to pursue counseling.

Program for teens during pregnancy

Maternal characteristic

Percent of teen mothers who participated in a teen pregnancy/parenting program during pregnancy.

2000-2004



N/A = Not Applicable

Sixteen percent of NM Navajo teen mothers participated in a program for pregnant or parenting teens while pregnant.

Teenage moms appeared to be more likely to participate in such classes if they lived in McKinley or San Juan counties, although this factor was not statistically significant.

Smoking cessation program during pregnancy

Maternal characteristic

Percent of mothers who participated in a smoking cessation class or support group during pregnancy.

2000-2004

All NM Navajo mothers (N=582)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

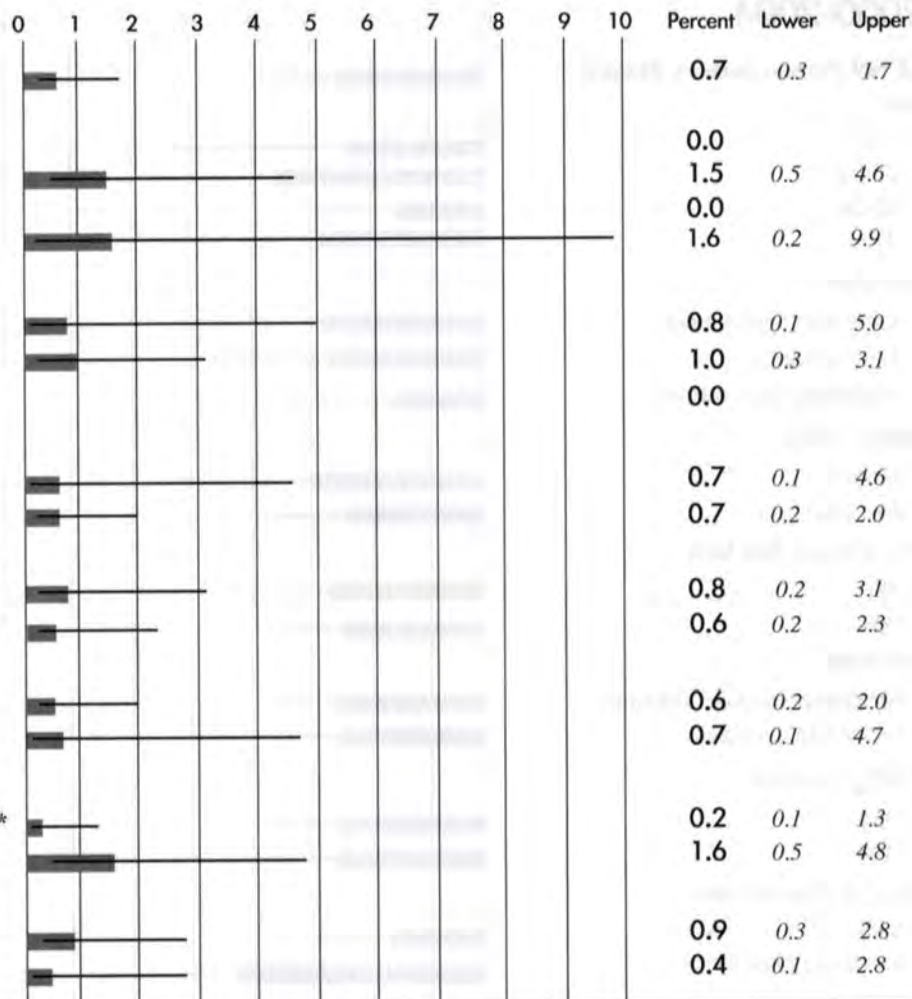
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* p < 0.05

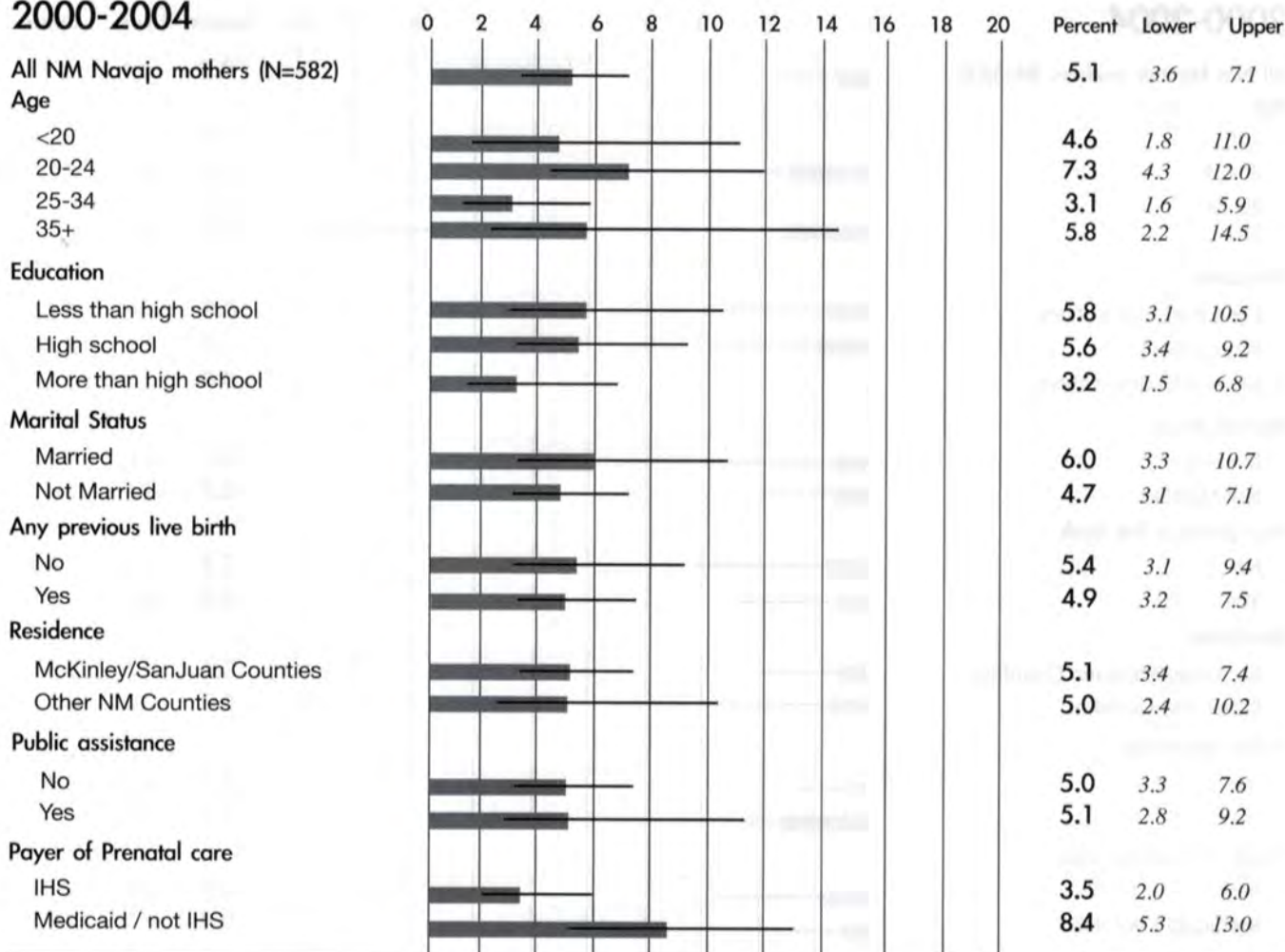
Less than 1% of NM Navajo mothers participated in a prenatal smoking cessation class or support group during pregnancy. Mothers were more likely to participate in such programs if they were on public assistance. Fourteen percent of mothers reported smoking before pregnancy (see page 25, Preconception Tobacco Use). These data may indicate an unmet need for smoking cessation support services among pregnant women.

Families FIRST services during pregnancy

Maternal characteristic

Percent of mothers who recieved prenatal families FIRST services during pregnancy

2000-2004



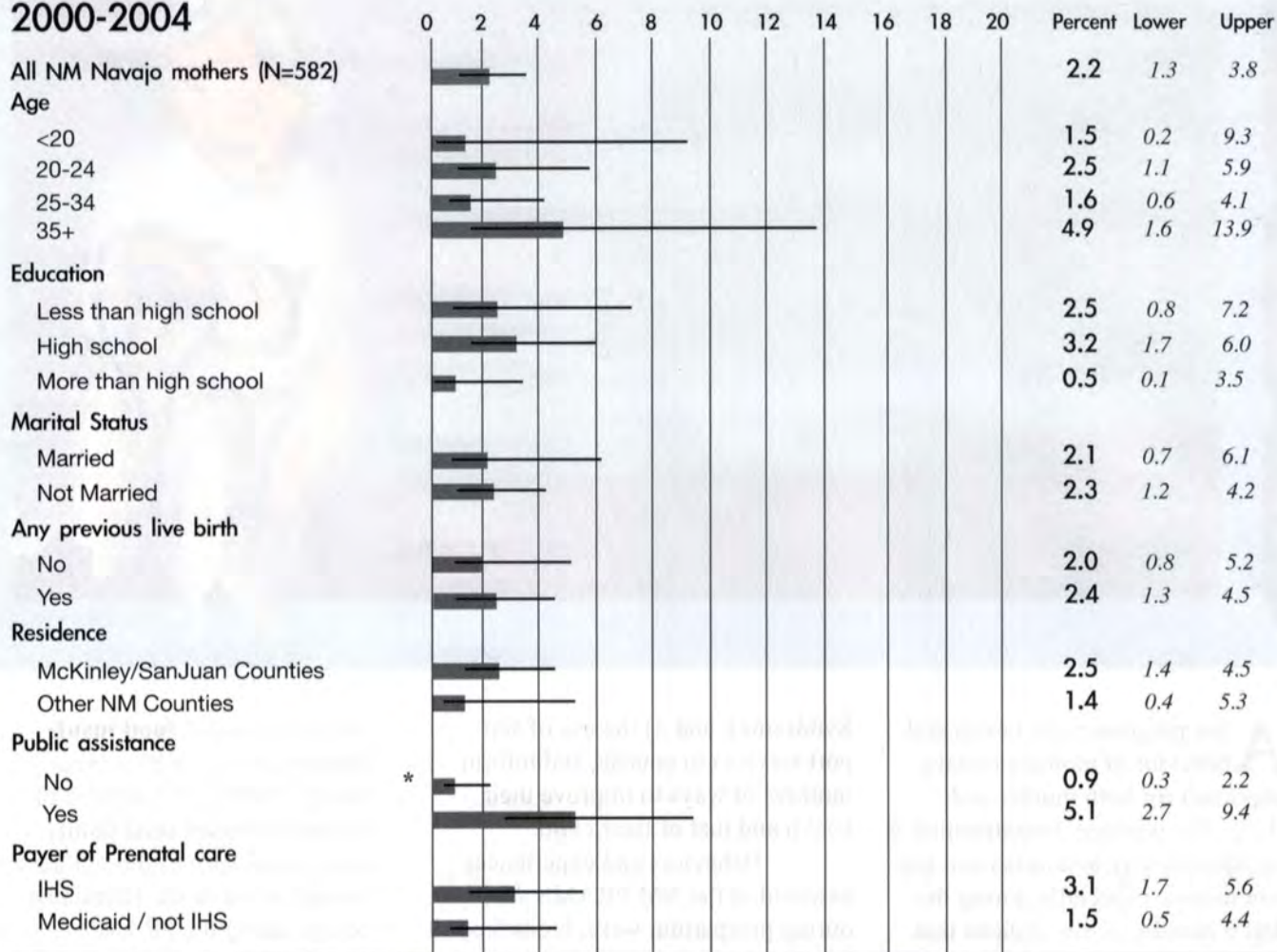
This table shows that only 5% of NM Navajo mothers participated in Families FIRST case management (a New Mexico state program for Medicaid-eligible pregnant women and their families).

Program to stop using drugs or alcohol during pregnancy

Maternal characteristic

Percent of mothers who participated in a program for drug or alcohol cessation during pregnancy.

2000-2004



* p < 0.05

Only 2% of NM Navajo mothers participated in a program to stop using drugs or alcohol during pregnancy.

Women were statistically significantly more likely to participate in such programs if they were on public assistance. The table on page 24 (Preconception - Frequent/Binge Alcohol Use) shows that 16% of women frequently consumed alcohol before pregnancy. The table

on page 31 (Prenatal Alcohol Use) shows that 5% of mothers reported alcohol use in their first trimester. These data may indicate that more mothers are in need of programs to stop using alcohol (or other drugs) during pregnancy.

POSTPARTUM



After pregnancy the health and behavior of mothers remain important for both mother and child. For instance, breastfeeding is the optimal way to nourish and nurture infants, especially during the first 6 months of life. Infants that are breastfed have a decreased risk of asthma, Types 1 and 2 diabetes, and obesity. In addition, mothers who breastfeed have a reduced risk of ovarian and breast cancers.

Other behaviors known to benefit mother and child are: 1) the use of contraception after pregnancy to help mothers prevent unintended pregnancy and space out pregnancy if women want to become pregnant in the future; 2) putting infants on their backs to sleep in order to decrease the risk of SIDS (Sudden Infant Death

Syndrome); and 3) the use of support services to educate and inform mothers of ways to improve their health and that of their child.

Behaviors and experiences assessed in the NM PRAMS survey during postpartum were: breastfeeding, contraception use, infant sleep position, food insufficiency, and support programs.

Key findings include:

- **Breastfeeding duration** is associated with education level. From 2000-2004, 58.1% of NM Navajo mothers reported that they breastfed for at least 2 months. Mothers with less education were less likely to engage in this healthy behavior.
- One-fourth of NM Navajo

mothers reported **food insufficiency** during or after pregnancy. Twenty-five percent of mothers reported their family often or sometimes did not have enough to eat in the 12 months before taking the PRAMS survey.

- After pregnancy, the **use of support services** varied for mothers. The most widely used programs were: home visiting services at 12%, breastfeeding class or support group at 10%, and programs for teens at 9%. The least used programs were: smoking cessation programs at 0.8%, programs to stop using drugs and alcohol at 2%, and programs for protection from family violence at 2.5%.

Breastfeeding initiation

Maternal characteristic

Percent of mothers who ever breastfed their new baby

2000-2004

All NM Navajo mothers (N=547)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

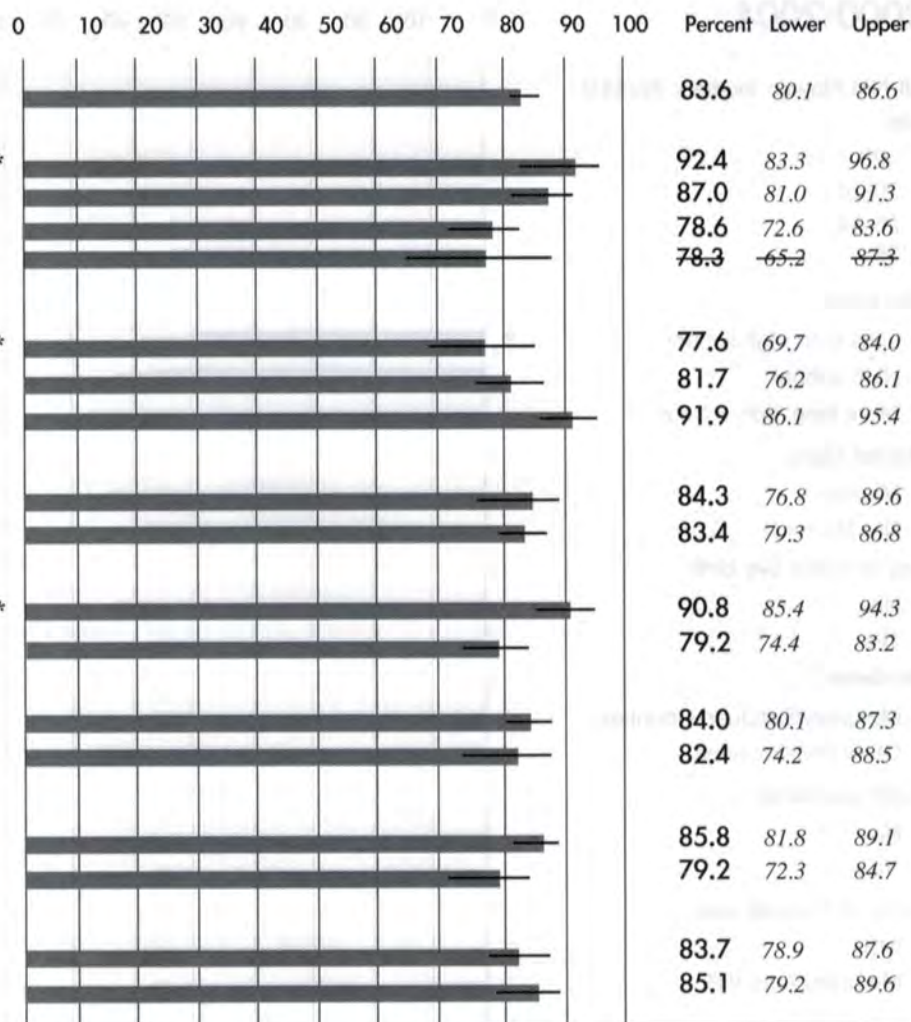
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* p < 0.05

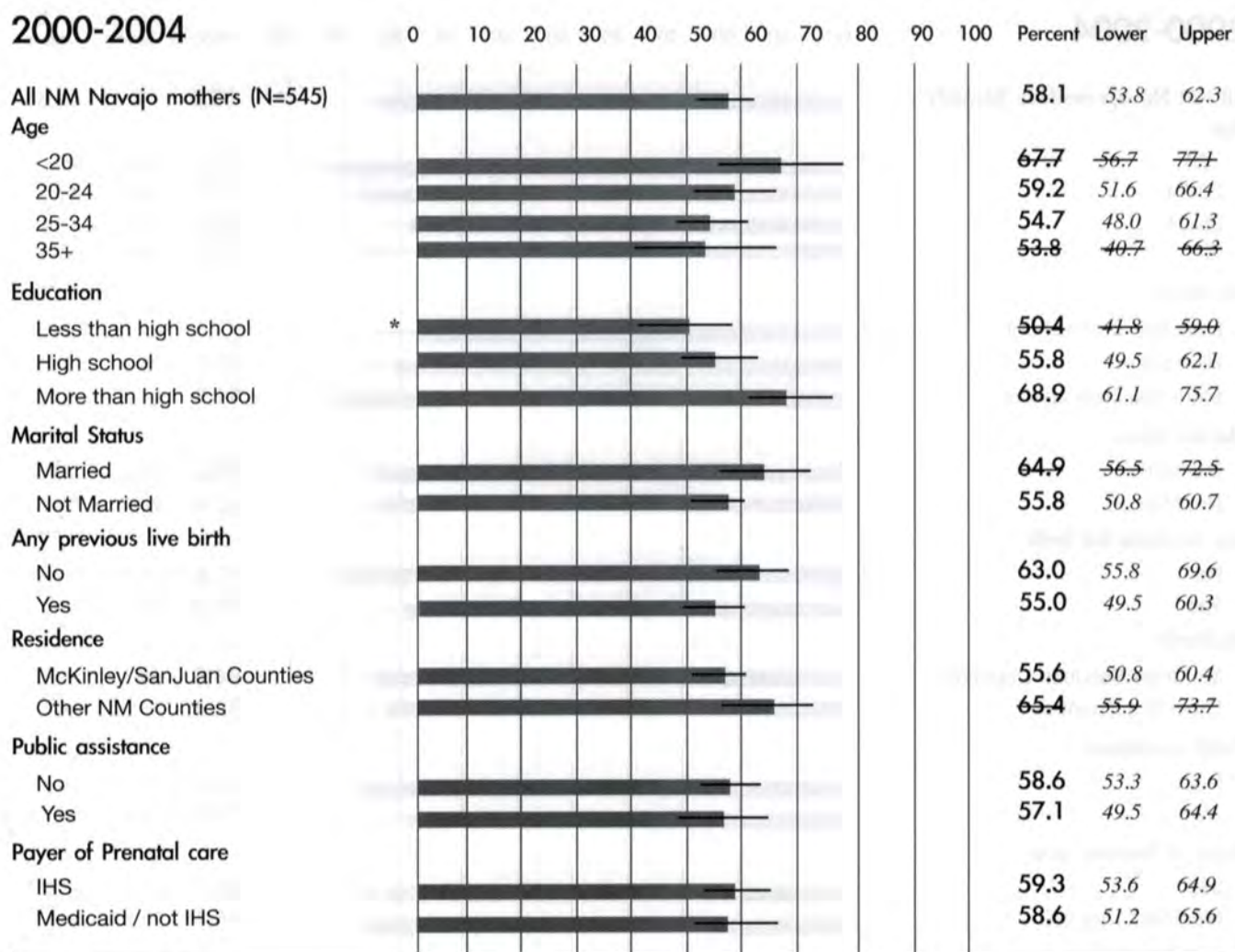
Approximately 84% of mothers ever breastfed their infants, exceeding the Healthy People 2010 target of at least 75% for breastfeeding initiation. Women who were younger, had more education or were first-time mothers were significantly more likely to “ever breastfeed their new baby.”

Breastfeeding duration

Maternal characteristic

Percent of mothers who breastfed for at least 2 months

2000-2004



* $p < 0.05$

Fifty-eight percent of mothers continued breastfeeding their infants for at least 2 months following initiation. The only maternal characteristic that showed a significant effect in this table is education. Mothers with more education were significantly more likely to breastfeed their infants for at least 2 months.

Postpartum contraception use

Maternal characteristic

Percent of women who were using any form of contraception at time of survey (2 to 6 months postpartum)

2000-2004

0 10 20 30 40 50 60 70 80 90 100 Percent Lower Upper

All NM Navajo mothers (N=579)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS

77.8 74.1 81.1

79.6 69.5 87.0

81.7 75.3 86.7

73.0 66.7 78.4

84.1 72.3 91.5

77.0 69.1 83.4

78.2 72.6 82.9

77.0 69.6 83.0

83.2 76.2 88.4

76.1 71.6 80.0

76.6 70.1 82.0

78.4 73.7 82.5

77.1 72.9 80.8

80.0 71.5 86.5

82.8 78.6 86.3

67.7 60.4 74.2

77.4 72.3 81.7

77.3 70.6 82.8

Approximately 78% of mothers were using contraception 2 to 6 months after giving birth. This high percentage indicates that women may be more careful about an immediate pregnancy after delivery. Use of contraception postpartum for these NM Navajo mothers did

not vary significantly by any other factors listed in this table. However, mothers who were on public assistance were somewhat less likely to use birth control immediately after giving birth.

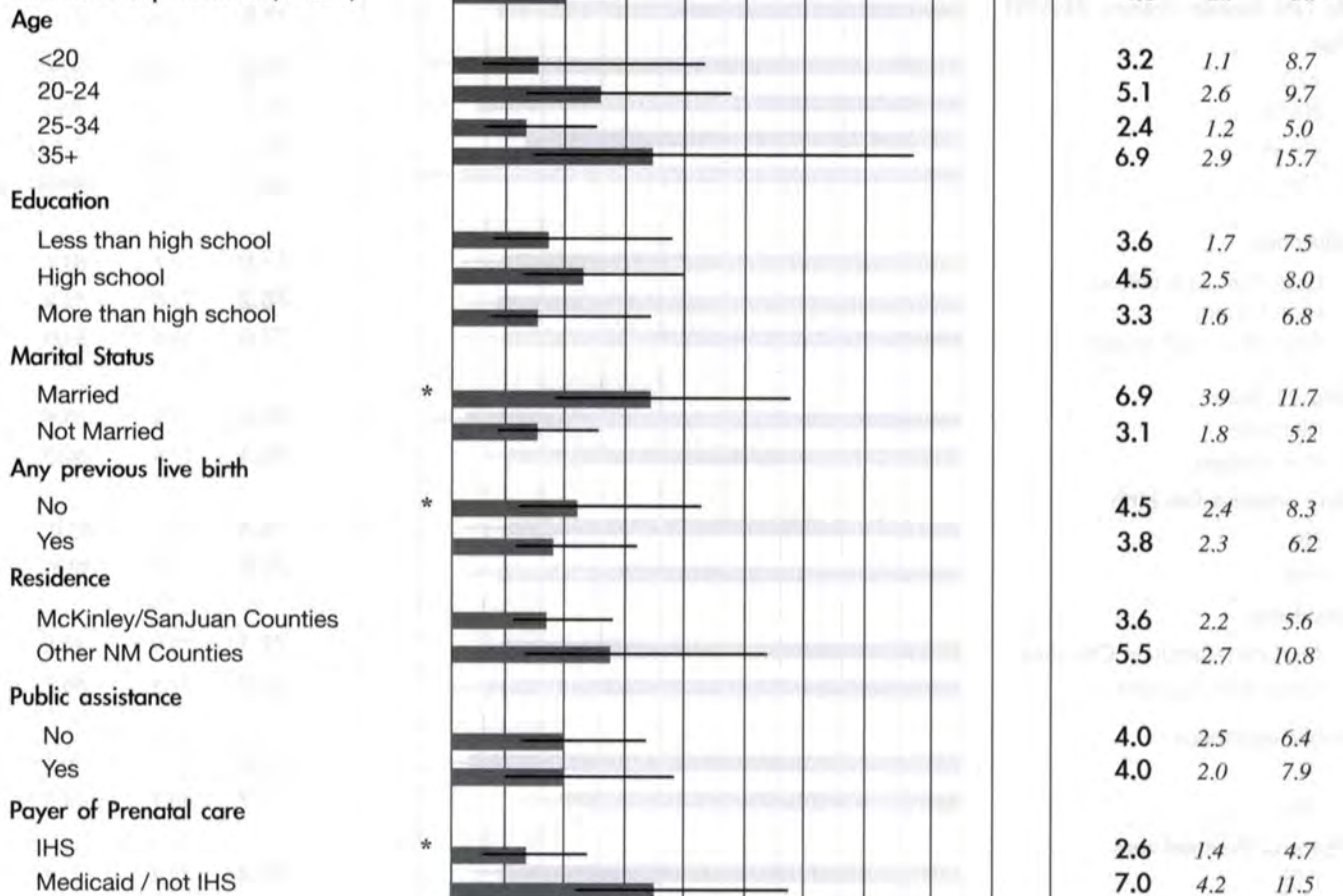
Families FIRST services after delivery

Maternal characteristic

Percent of mothers who received postpartum Families FIRST services after delivery

2000-2004

All NM Navajo mothers (N=577)



* p < 0.05

Four percent of mothers received Families FIRST services after delivery. Mothers were significantly more likely to receive these services if they were married, first time mothers or had Medicaid health care coverage.

Program to stop using drugs or alcohol after delivery

Maternal characteristic

Percent of mothers who participated in a postpartum program for drug or alcohol cessation after delivery

2000-2004

All NM Navajo mothers (N=577)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

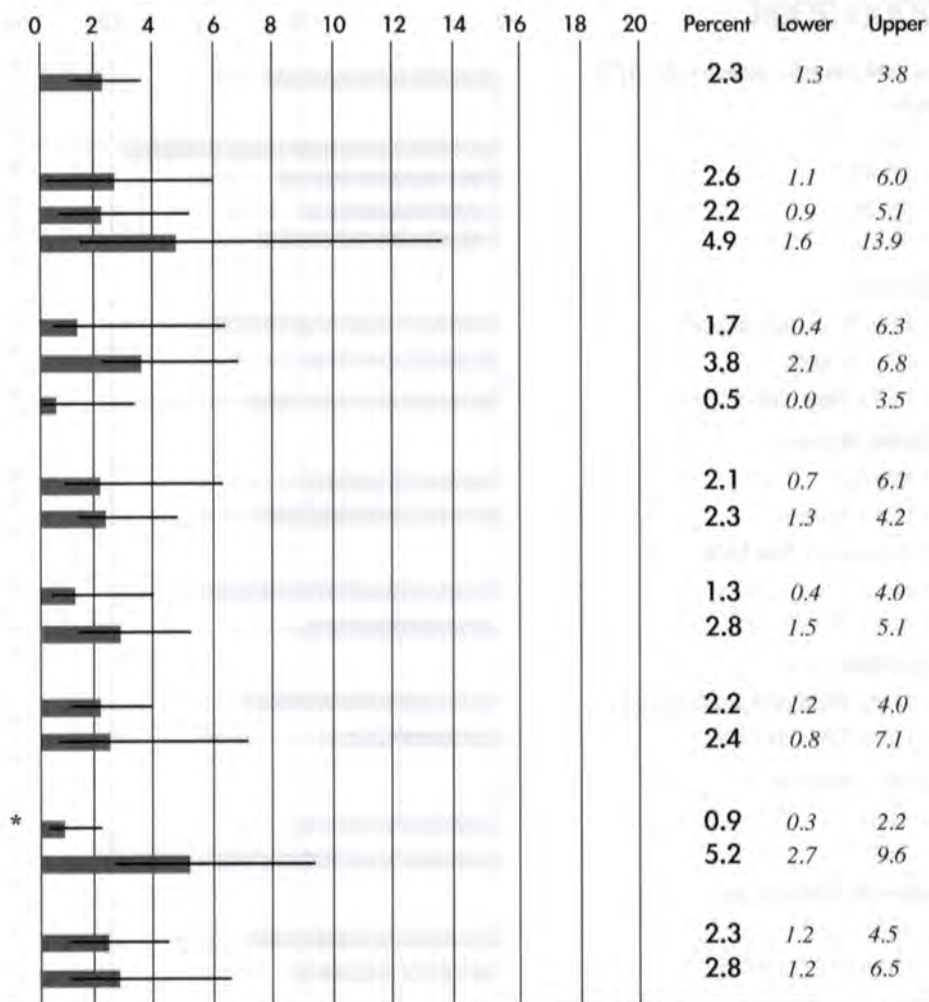
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* $p < 0.05$

After giving birth, only 2 percent of mothers participated in a program that would help them stop using drugs or alcohol. This is the same proportion of mothers who reported participating in such programs during pregnancy (see page 45). Of all the factors listed in the table above, only whether or not a woman was on public assistance statistically significantly predicted her participation in these programs.

Five percent of mothers on public assistance participated in such cessations programs compared with less than 1% of mothers who were not on public assistance. The table on page 24 (Preconception - Frequent/Binge Alcohol Use) shows that 16% of women were frequent or binge drinkers before pregnancy. And, the table on Prenatal Alcohol Use (page 31) indicates that 5% of mothers consumed alcohol during

their last trimester. These tables may indicate that more new mothers are in need of programs to stop using drugs or alcohol before, during and after pregnancy. Programs and educational strategies to increase new mothers' participation in these types of programs are needed in order to more fully protect the health and well-being of both mothers and their newborns.

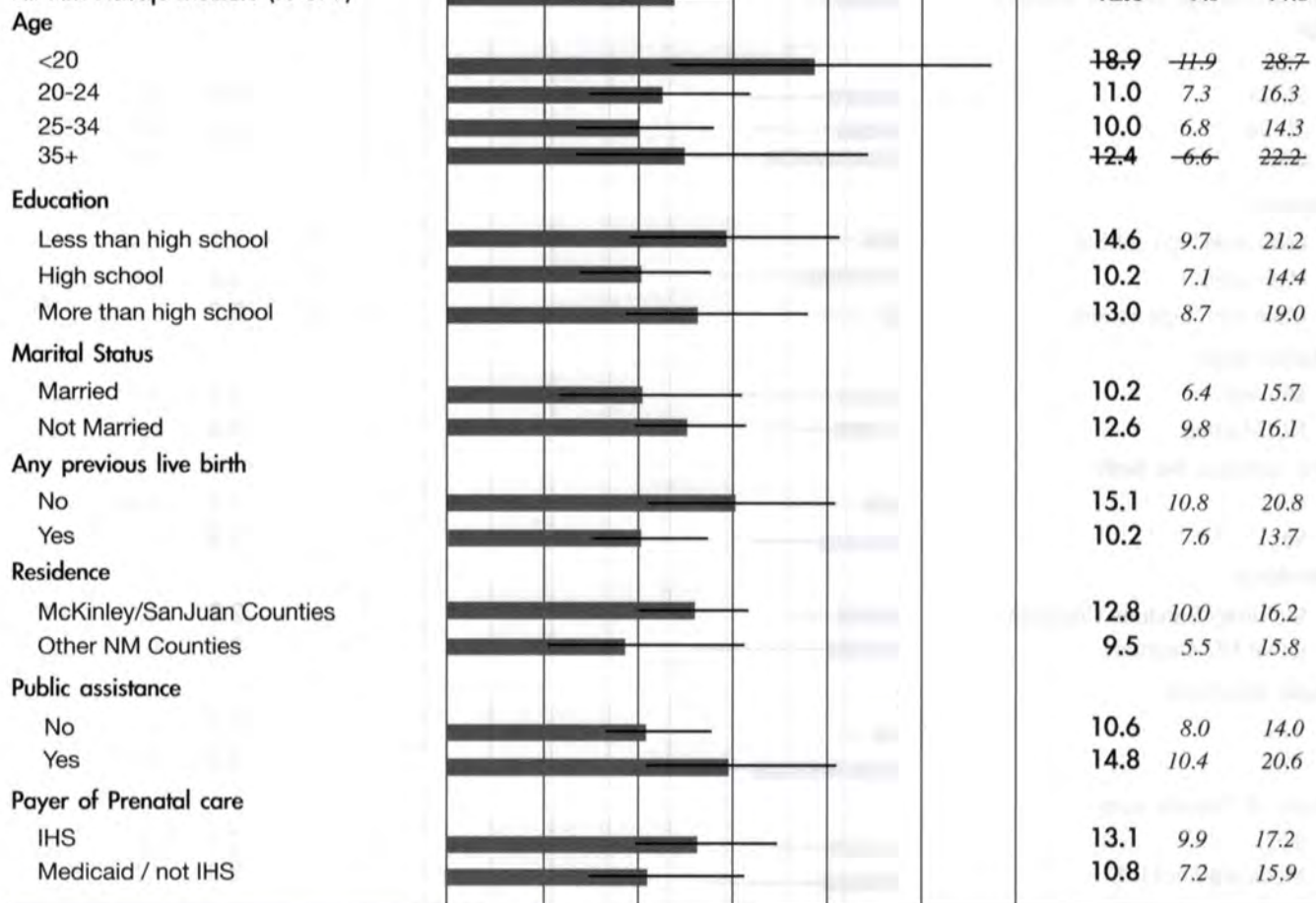
Home visiting services after delivery

Maternal characteristic

Percent of mothers who received home visiting services after delivery

2000-2004

All NM Navajo mothers (N=577)



Only 12% of mothers received home visits after giving birth. None of the maternal characteristics listed in this table predicted whether or not mothers received these important postpartum services.

Parenting class after delivery

Maternal characteristic

Percent of mothers who participated in a parenting class after delivery

2000-2004

All NM Navajo mothers (N=576)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

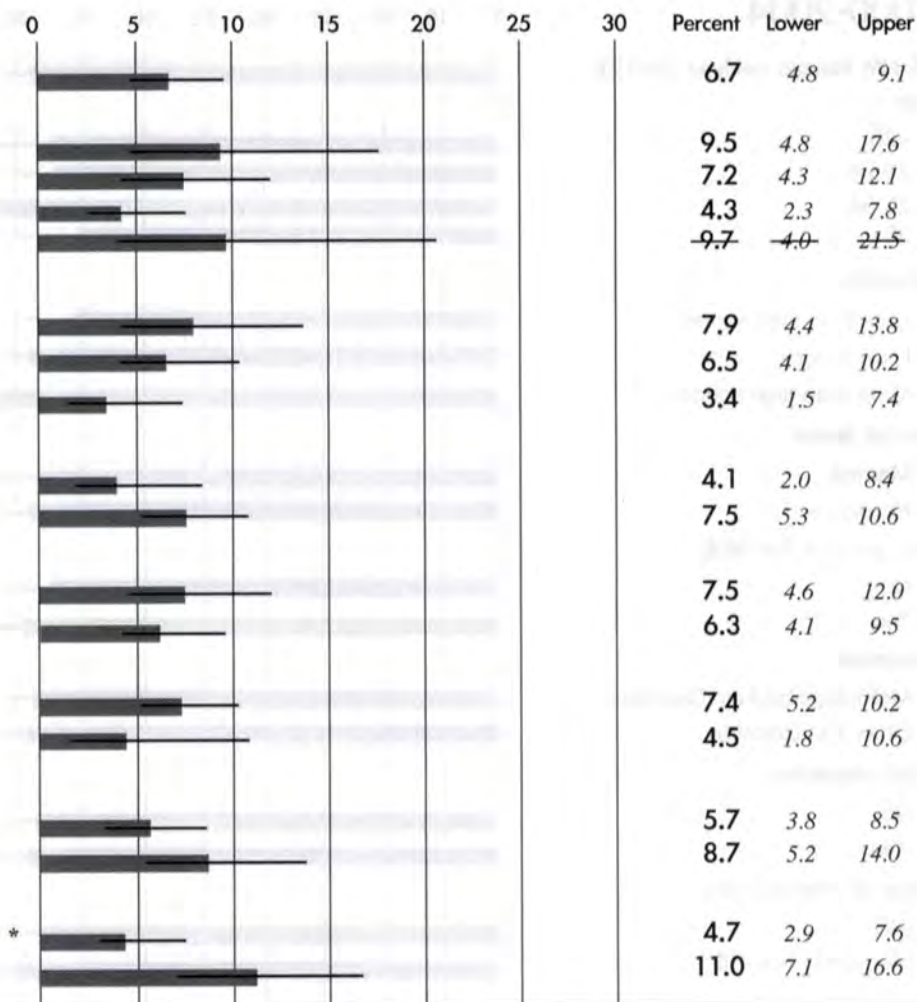
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* p < 0.05

Approximately 7% of mothers participated in a parenting class after giving birth. The only factor in this table that significantly predicted whether or not mothers participated in this type of class was the mother's "payer of prenatal care." More Medicaid-covered mothers participated in these classes.

Infant sleep position

Maternal characteristic

Percent of mothers who placed their baby on their back to sleep

2000-2004

All NM Navajo mothers (N=553)

	0	10	20	30	40	50	60	70	80	90	100	Percent	Lower	Upper
Age														
<20												74.5	63.6	83.0
20-24												74.2	66.7	80.5
25-34												84.7	79.1	88.9
35+												70.3	57.4	80.5
Education														
Less than high school												71.7	63.0	79.1
High school												78.7	72.9	83.5
More than high school												83.9	77.2	88.9
Marital Status														
Married												76.8	68.8	83.3
Not Married												78.6	74.2	82.5
Any previous live birth														
No												75.0	68.2	80.8
Yes												79.9	75.0	84.0
Residence														
McKinley/SanJuan Counties												77.7	73.4	81.5
Other NM Counties												79.6	70.6	86.4
Public assistance														
No												77.6	72.9	81.8
Yes												79.3	72.4	84.9
Payer of Prenatal care														
IHS												77.1	71.8	81.7
Medicaid / not IHS												80.3	73.8	85.5

* $p < 0.05$

Seventy-eight percent of NM Navajo mothers placed their babies on their back to sleep (currently considered to be the safest position for a sleeping infant). This table shows that age is associated with this behavior. Although the majority of mothers in all age groups engaged in this healthy behavior, those who were between 25 and 34 years of age appeared to be significantly more likely to place their babies in the correct sleep position.

Breastfeeding class or support group after delivery

Maternal characteristic

Percent of mothers who participated in a postpartum breastfeeding class/support group after delivery.

2000-2004

All NM Navajo mothers (N=578)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/San Juan Counties *

Other NM Counties

Public assistance

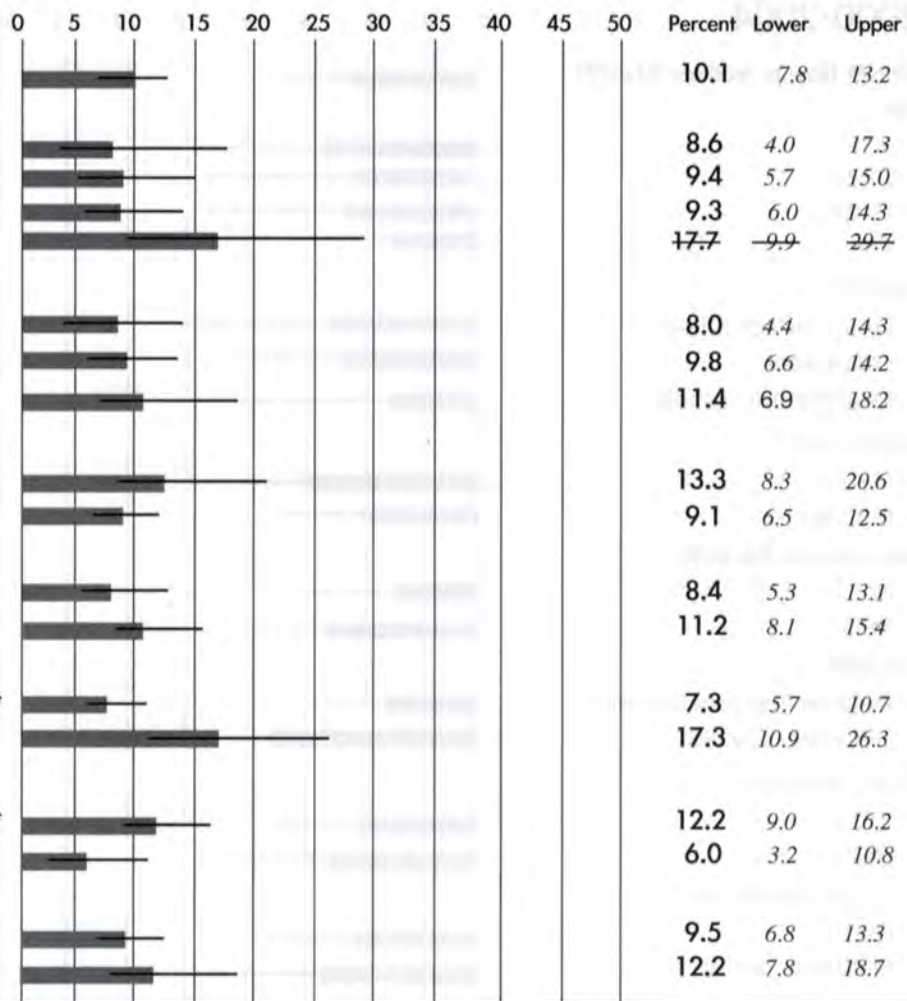
No *

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* p < 0.05

This table shows that 10 percent of NM Navajo mothers participated in a breastfeeding class or a support group after giving birth. Two factors were found to be significant predictors of these healthy behaviors: living in counties other than McKinley or San Juan as well as not being on public assistance.

Counseling after delivery

Maternal characteristic

Percent of mothers who had postpartum counseling for a personal or family problem after delivery

2000-2004

All NM Navajo mothers (N=577)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

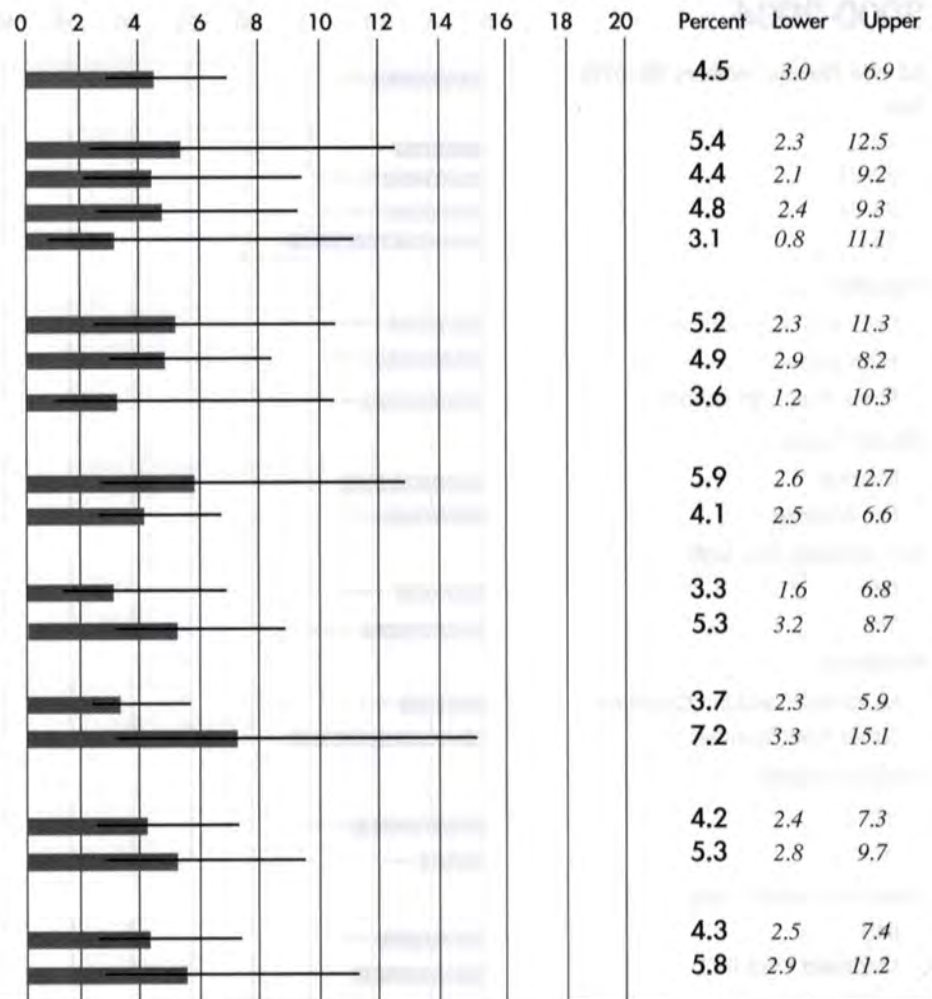
No

Yes

Payer of Prenatal care

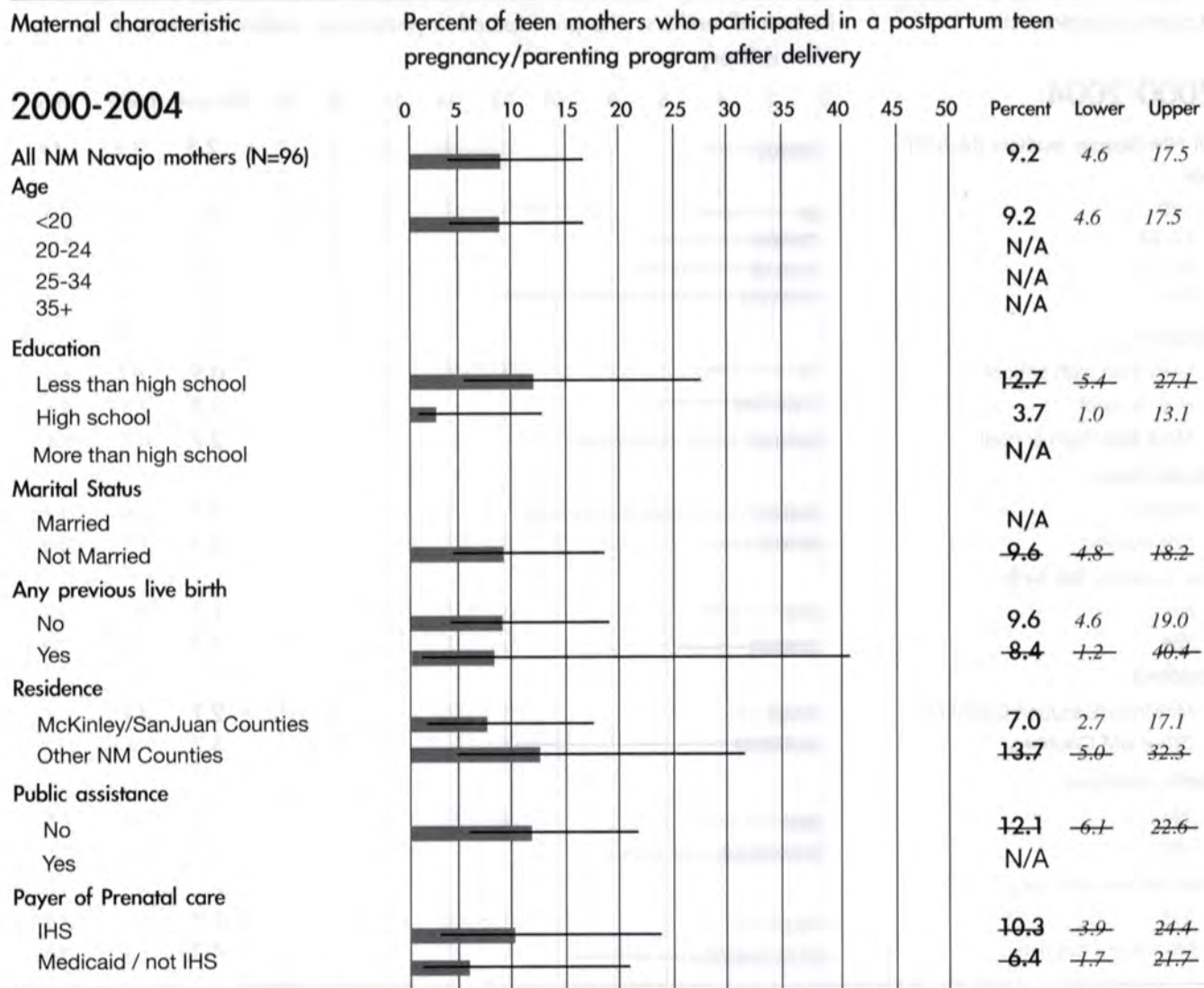
IHS

Medicaid / not IHS



This table shows that 4.5% of mothers participated in counseling for personal or family problems after giving birth.

Program for teens after delivery



N/A = Not Applicable.

Only 9% of teenage mothers participated in teen pregnancy or parenting programs after giving birth. Because there were only 96 teenage mothers in this survey, it is not surprising that none of the factors in the table appeared to predict whether or not these young mothers sought such helpful programs.

Program for protection from family violence after delivery

Maternal characteristic

Percent of mothers who participated in postpartum violence protection services after delivery

2000-2004

All NM Navajo mothers (N=577)

	0	2	4	6	8	10	12	14	16	18	20	Percent	Lower	Upper
Age														
<20												0.8	0.1	4.8
20-24												2.7	1.1	6.2
25-34												2.8	1.0	7.4
35+												3.4	0.9	12.4
Education														
Less than high school												0.9	0.1	4.8
High school												3.4	1.8	6.3
More than high school												2.7	0.7	9.8
Marital Status														
Married												2.7	0.6	11.1
Not Married												2.4	1.3	4.3
Any previous live birth														
No												1.7	0.7	4.5
Yes												2.9	1.4	5.9
Residence														
McKinley/SanJuan Counties												2.1	1.1	3.8
Other NM Counties												3.7	1.1	11.8
Public assistance														
No												1.7	0.7	4.4
Yes												4.1	2.0	8.3
Payer of Prenatal care														
IHS												1.7	0.9	3.6
Medicaid / not IHS												4.3	1.8	9.8

This table shows that 2.5 % of NM Navajo mothers, after giving birth, participated in programs providing protection from family violence.

The preconception table on physical abuse (page 26) showed that 15% of women were abused before pregnancy. The prenatal table on physical abuse (page 33) indicated that 11% of women suffered abuse during pregnancy. Yet the table above shows that less than

3% of mothers participated in violence protection programs after giving birth. These data may indicate lost opportunities to protect mothers from physical violence after delivery. Public health and community strategies to engage women and offer protection are needed in order to further secure the health and safety of women and their infants.

Smoking cessation program after pregnancy

Maternal characteristic

Percent of mothers who participated in a postpartum smoking cessation class or support group after delivery

2000-2004

All NM Navajo mothers (N=577)

Age

<20

20-24

25-34

35+

Education

Less than high school

High school

More than high school

Marital Status

Married

Not Married

Any previous live birth

No

Yes

Residence

McKinley/SanJuan Counties

Other NM Counties

Public assistance

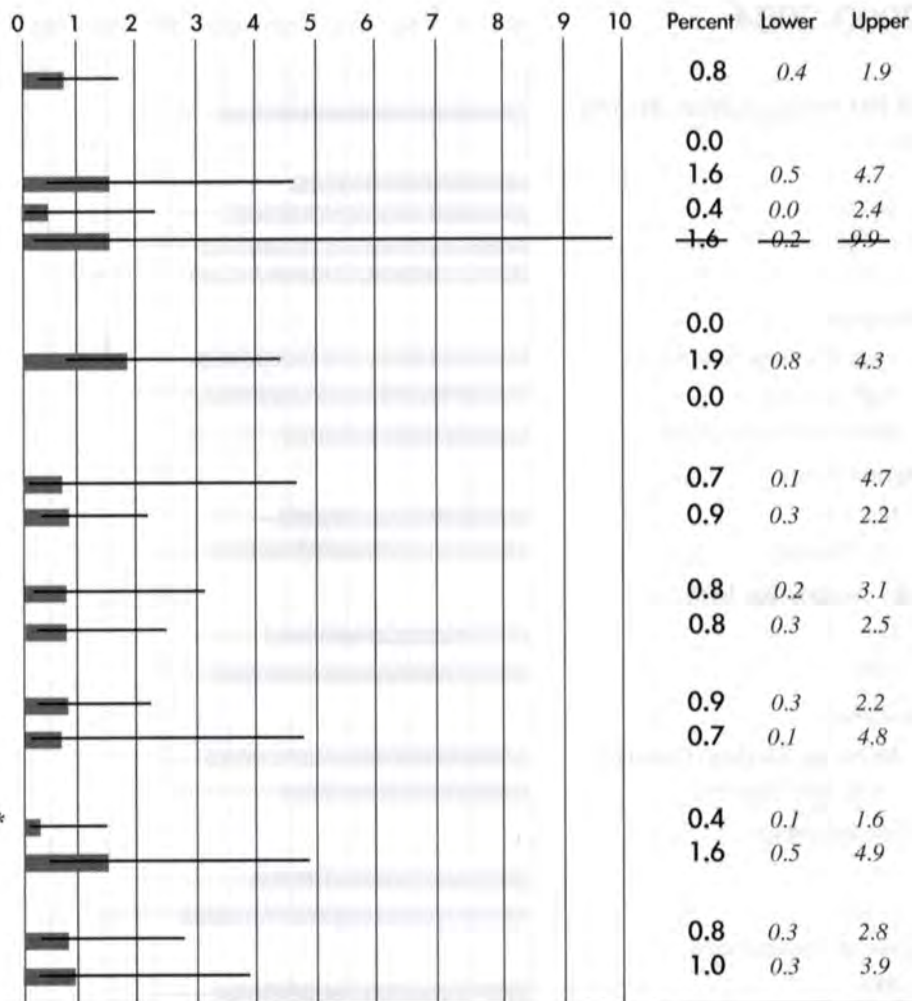
No

Yes

Payer of Prenatal care

IHS

Medicaid / not IHS



* p < 0.05

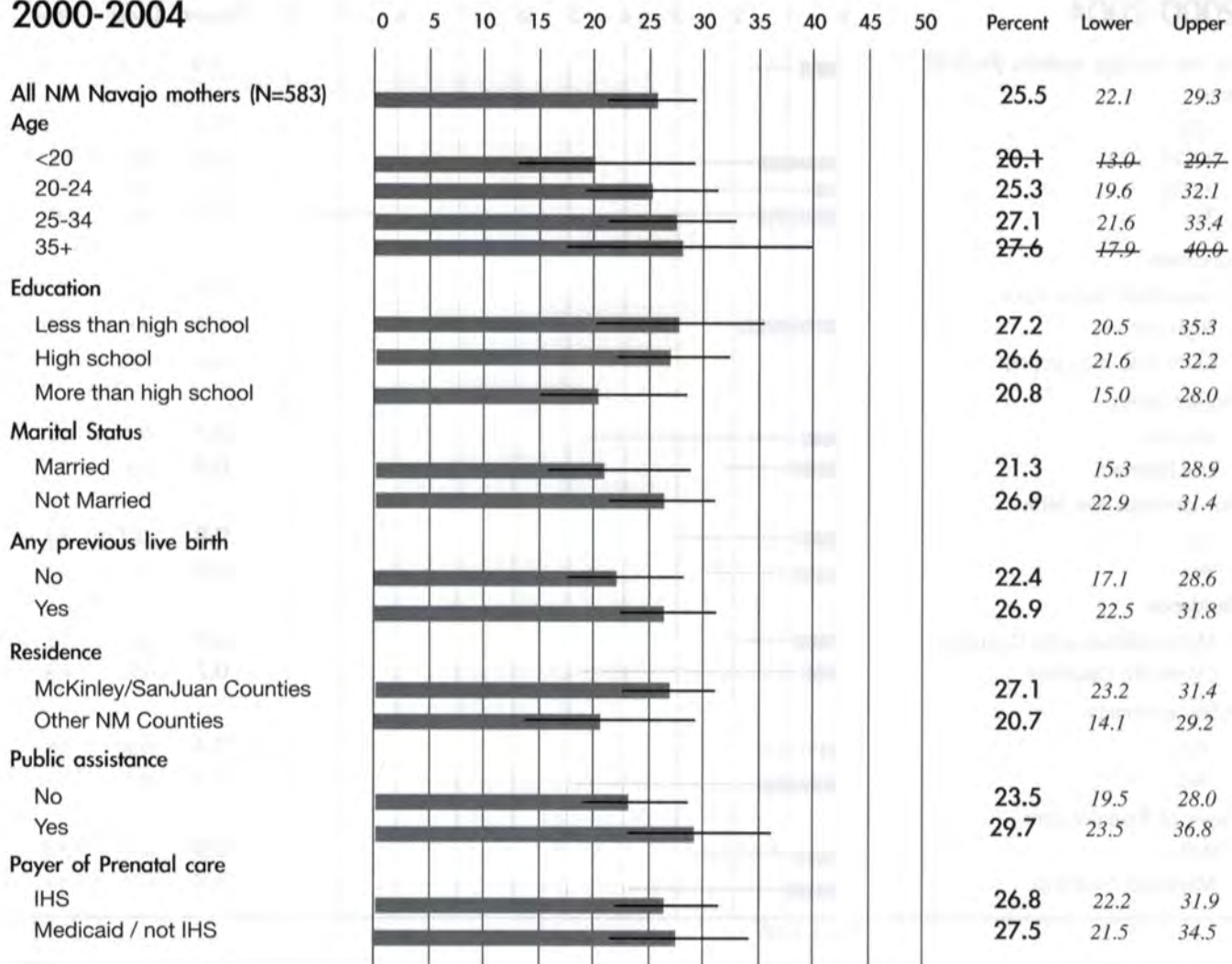
Less than 1% of NM Navajo mothers participated in a smoking cessation class or support group after giving birth. Because the number of mothers included in this table is small (with only 1% of mothers in the survey saying "yes" to this question), it is not surprising that only 1 factor (public assistance) was found to significantly predict whether or not mothers participated in such important program activities after giving birth.

Food Insufficiency

Maternal characteristic

Percent of mothers who said their family often or sometimes did not have enough to eat in the previous 12 months before taking the survey

2000-2004



Twenty-six percent of mothers reported that their families did not have sufficient food in the 12 months before completing this survey. There were no maternal

characteristics statistically associated with whether mothers and their families had enough to eat.



Discussion

The results in this report can serve as a baseline for monitoring changes in behaviors and experiences of New Mexico Navajo mothers over the course of pregnancy. These results identified important health issues to address during each pregnancy period.

Preconception Behaviors and Experiences

Risk behaviors and Experiences

- Women who plan their pregnancy have been shown to have more healthy outcomes. However, two-thirds of NM Navajo mothers who were not trying to get pregnant failed to use **contraception**.
- Most **vitamins** contain **folic acid**, and adequate intake of folic

acid has proven to be effective in reducing the occurrence of Neural Tubular Defects (NTD). However, the prevalence of regular multivitamin use during the month before pregnancy was low for all women.

Preconception health conditions

- In addition to addressing risk behaviors, an aim of preconception care is to identify and provide appropriate management of chronic conditions that may affect women's health during and after pregnancy and that may have a lifetime negative impact on infants. Among the pre-pregnancy health conditions assessed, the prevalence of both being **overweight** and having **diabetes** was high. As a

result, a substantial proportion of mothers were at increased risk of pregnancy complications and poorer health status before pregnancy.

Prenatal Behaviors and Experiences

Risk behaviors and experiences

- Prenatal care gives mothers the opportunity to learn about screening for birth defects, safe medications, breastfeeding, and unhealthy behaviors. However, a large proportion of NM Navajo mothers entered **prenatal care late** or not at all. These results underscore the need to increase efforts to ensure

Continued on next page.

Continued from previous page.

that mothers enter prenatal care early and receive at least adequate care. Women with less education were at particular risk of receiving late-term or no care.

- Good **oral health** and dental visits help reduce the number of preterm births and low birth weight infants.¹ However, only a small percentage of NM Navajo mothers discussed oral health with their providers or sought dental care during pregnancy.
- **Physical abuse** during pregnancy not only causes trauma to the mother and fetus but also results in high levels of stress that can put the mother at risk for adverse health and pregnancy outcomes. Unfortunately, physical abuse was experienced by some mothers in the survey, and the prevalence of physical abuse did not change substantially from preconception to pregnancy (from 15.0% to 11.4%). Younger women appeared to be more likely to be abused and remain in unsafe environments after becoming pregnant.
- Medical guidelines advise against any **alcohol and tobacco use** during pregnancy. Alcohol use puts a woman at risk

of having an infant with Fetal Alcohol Syndrome (FAS), and tobacco use leads to adverse health effects such as restricted uterine growth, stillbirth and low birth weight. Although the reported prevalences for both alcohol and tobacco use were less than 10% in this survey, mothers still need to be made aware of the risks of using alcohol and tobacco during pregnancy and to be given more opportunities to enter cessation programs.

Postpartum Behaviors and Experiences

Risk behaviors and experiences

- The consistent and proper use of **contraception** is essential to prevent unintended and unwanted pregnancies. Contraceptive use increased from 35% before pregnancy to 78% postpartum among women who did not want to be pregnant. This finding suggests that women may have greater awareness of or access to contraception after pregnancy compared to before pregnancy.
- As described before, **breast-feeding** offers many healthy benefits to mother and child. Breastfeeding initiation among mothers was high (84%).

However, only 58% continued to breastfeed for at least 2 months. These results indicate that, in addition to encouraging mothers to begin breastfeeding, mothers should also be encouraged to prolong breastfeeding, especially mothers with less education.

- **Sufficient** supply of nutritious **food** before, during, and after pregnancy is essential to the health of mother and child. However, one-fourth of NM Navajo mothers reported food insufficiency during or after pregnancy. This finding indicates that these mothers may not have sufficient nutritional intake during pregnancy and/or while breastfeeding.
- In general, **support programs** focus on improving maternal experiences and behavior. However, mothers reported low participation in support programs that aim to reduce family violence and use of alcohol, drugs and cigarettes. These findings identify an important need: determining why NM Navajo mothers did not participate in such programs, or why these programs might not be available.

Notes:

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 Jul; 132(7):875-80.



Conclusions and Recommendations

The results discussed in this report identify important maternal and child health indicators that need improvement. These findings indicate that many New Mexico Navajo women did not engage in healthy behaviors and/or experienced unhealthy outcomes throughout pregnancy.

In view of these results, targeted and accessible public health services, education, and interventions are needed. The following recommendations constitute a framework that public health and health care providers can use to improve the health of NM Navajo mothers and their infants:

1. Increase education about the benefits of **folic acid and multivitamin consumption**, particularly before pregnancy. Conduct research to identify the barriers to taking multivitamins and folic acid regularly.
2. Increase education efforts to make women more aware of and guide them to programs that help them overcome **obesity** and become healthier. **Healthy foods**—like fruits and vegetables—must also be made accessible, and public health

and health care programs must strategize on how to increase **physical activity** among high-risk women.

3. Increase collaborations between tribal health programs and healthcare professionals to identify barriers to **early prenatal care** and strategize to reduce or eliminate these barriers.
4. Increase efforts to educate mothers on the importance of **oral health**, including the risks of poor oral health during pregnancy. Oral health education programs targeted at pregnant women and new mothers are needed.
5. Increase provider screening for **domestic abuse** during prenatal care and refer at-risk mothers to appropriate and effective services.
6. Improve education and access to **contraception** methods to prevent unintended and unwanted pregnancies.
7. In 2008 the Navajo Nation passed legislation in support of **breastfeeding** in the workplace, allowing mothers greater opportunity to breastfeed. Health professionals need to ensure

that mothers receive the resources needed to feel confident and comfortable with breastfeeding.

8. Increase awareness of programs that provide nutritious food to pregnant women, new mothers and their infants, thereby addressing the issue of **food insufficiency**.
9. Increase referrals of mothers to effective and culturally relevant **support services** to improve unhealthy situations and behaviors. Tribal health programs and health care professionals must work together and support research to determine why mothers do not use available support programs as well as why programs might not be available.
10. Increase initiatives that encourage **family planning**. Women who plan their pregnancy are more likely to enter pregnancy with a better health status, have their chronic health conditions under control, and be aware of unhealthy behaviors and experiences that can endanger their health and the health of their unborn child.



Appendix

Phase 5 PRAMS Survey

First, we would like to ask a few questions about you and the time before you got pregnant with your new baby. Please check the box next to your answer.

1. *Just before you got pregnant, did you have health insurance?* Do not count Medicaid.

☐ No
☐ Yes

2. *Just before* you got pregnant, were you on Medicaid?

☐ No
☐ Yes

3. During the *month before* you got pregnant with your new baby, how many times a week did you take a **multivitamin** or a **prenatal vitamin**? These are pills that contain many different vitamins and minerals.

- ☐ I didn't take a multivitamin or a prenatal vitamin at all
- ☐ 1 to 3 times a week
- ☐ 4 to 6 times a week
- ☐ Every day of the week

4. What is *your* date of birth?

Month Day Year

5. *Just before you got pregnant with your new baby, how much did you weigh?*

Pounds **OR** Kilos

- 6. How tall are you without shoes?**

_____ Feet _____ Inches

OR _____ Centimeters

7. *Before you got pregnant with your new baby, did you ever have any other babies who were born alive?*

☐ No  **Go to Question 10**

☐ Yes

8. Did the baby born *just before* your new one weigh 5 pounds, 8 ounces (2.5 kilos) *or less* at birth?

☐ No
☐ Yes

9. Was the baby *just before* your new one born *more than 3 weeks* before its due date?

☐ No
☐ Yes

The next questions are about the time when you got pregnant with your *new* baby.

- 10. Thinking back to *just before* you got pregnant with your *new* baby, how did you feel about becoming pregnant?**

Check one answer

☐ I wanted to be pregnant sooner

☐ I wanted to be pregnant later

☐ I wanted to be pregnant then

☐ I didn't want to be pregnant then
or at any time in the future

11. When you got pregnant with your new baby, were you trying to get pregnant?

☐ No

☐ Yes

Go to Question 14

12. When you got pregnant with your new baby, were you or your husband or partner doing anything to keep from getting pregnant?

(Some things people do to keep from getting pregnant include not having sex at certain times [rhythm] or withdrawal, and using birth control methods such as the pill, condoms, cervical ring, IUD, having their tubes tied, or their partner having a vasectomy.)

☐ No

☐ Yes

Go to Question 14

13. What were your or your husband's or partner's reasons for not doing anything to keep from getting pregnant?

Check all that apply

☐ I didn't mind if I got pregnant

☐ I thought I could not get pregnant at that time

☐ I had side effects from the birth control method I was using

☐ I had problems getting birth control when I needed it

☐ I thought my husband or partner or I was sterile (could not get pregnant at all)

☐ My husband or partner didn't want to use anything

☐ Other → Please tell us:

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 were *sure* you were pregnant? (For example, you had a pregnancy test or a doctor or nurse said you were pregnant.)

Weeks OR

Months

☐ I don't remember

15. How many weeks or months pregnant were you when you had your first visit for prenatal care? Do not count a visit that was only for a pregnancy test or only for WIC (the Special Supplemental Nutrition Program for Women, Infants, and Children).

Weeks OR

Months

☐ I didn't go for prenatal care

16. Did you get prenatal care as early in your pregnancy as you wanted?

☐ No

☐ Yes

☐ I didn't want prenatal care

Go to Question 18

17. Here is a list of problems some women can have getting prenatal care. For each item, circle **Y** (Yes) if it was a problem for you during your most recent pregnancy or circle **N** (No) if it was not a problem or did not apply to you.

- | | No | Yes |
|---|----|-----|
| a. I couldn't get an appointment when I wanted one | N | Y |
| b. I didn't have enough money or insurance to pay for my visits | N | Y |
| c. I had no way to get to the clinic or doctor's office | N | Y |
| d. I couldn't take time off from work . . . | N | Y |
| e. The doctor or my health plan would not start care as early as I wanted . . . | N | Y |
| f. I didn't have my Medicaid card | N | Y |
| g. I had no one to take care of my children | N | Y |
| h. I had too many other things going on | N | Y |
| i. I didn't want anyone to know I was pregnant | N | Y |
| j. Other | N | Y |
- Please tell us:

If you did not go for prenatal care, go to Page 4, Question 20.

18. How was your prenatal care paid for?

Check all that apply

- ☐ Medicaid
- ☐ Personal income (cash, check, or credit card)
- ☐ Health insurance or HMO (including insurance from your work or your husband's work)
- ☐ Indian Health Service (PHS)
- ☐ City or county indigent fund
- ☐ Other —————> Please tell us:

19. During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below? Please count only discussions, not reading materials or videos. For each item, circle **Y** (Yes) if someone talked with you about it or circle **N** (No) if no one talked with you about it.

	No	Yes
a. How smoking during pregnancy could affect my baby	N	Y
b. Breastfeeding my baby	N	Y
c. How drinking alcohol during pregnancy could affect my baby	N	Y
d. Using a seat belt during my pregnancy	N	Y
e. Birth control methods to use after my pregnancy	N	Y
f. Medicines that are safe to take during my pregnancy	N	Y
g. How using illegal drugs could affect my baby	N	Y
h. Doing tests to screen for birth defects or diseases that run in my family	N	Y
i. What to do if my labor starts early	N	Y
j. Getting tested for HIV (the virus that causes AIDS)	N	Y
k. Physical abuse to women by their husbands or partners	N	Y

20. At any time during your most recent pregnancy or delivery, did you have a test for HIV (the virus that causes AIDS)?

- ☐ No
☐ Yes
☐ I don't know

The next questions are about your most recent pregnancy and things that might have happened during your pregnancy.

21. During your most recent pregnancy, were you on WIC (the Special Supplemental Nutrition Program for Women, Infants, and Children)?

- ☐ No
☐ Yes

22. Did you have any of these problems during your most recent pregnancy? For each item, circle **Y** (Yes) if you had the problem or circle **N** (No) if you did not.

	No	Yes
a. High blood sugar (diabetes) that started <i>before</i> this pregnancy	N	Y
b. High blood sugar (diabetes) that started <i>during</i> this pregnancy	N	Y
c. Vaginal bleeding	N	Y
d. Kidney or bladder (urinary tract) infection	N	Y
e. Severe nausea, vomiting, or dehydration	N	Y
f. Cervix had to be sewn shut (incompetent cervix)	N	Y
g. High blood pressure, hypertension (including pregnancy-induced hypertension [PIH]), preeclampsia, or toxemia	N	Y
h. Problems with the placenta (such as abruptio placentae or placenta previa)	N	Y
i. Labor pains more than 3 weeks before my baby was due (preterm or early labor)	N	Y
j. Water broke more than 3 weeks before my baby was due (premature rupture of membranes [PROM])	N	Y
k. I had to have a blood transfusion	N	Y
l. I was hurt in a car accident	N	Y

If you did not have any of these problems, go to Question 24.

23. Did you do any of the following things because of these problems? For each item, circle **Y** (Yes) if you did that thing or circle **N** (No) if you did not.

- | | No | Yes |
|--|----|-----|
| a. I went to the hospital or emergency room and stayed less than 1 day | N | Y |
| b. I went to the hospital and stayed 1 to 7 days | N | Y |
| c. I went to the hospital and stayed more than 7 days | N | Y |
| d. I stayed in bed at home more than 2 days because of my doctor's or nurse's advice | N | Y |

The next questions are about smoking cigarettes and drinking alcohol.

24. Have you smoked at least 100 cigarettes in the past 2 years? (A pack has 20 cigarettes.)

- ☐ No —————→ **Go to Question 28**
☐ Yes

25. In the 3 months before you got pregnant, how many cigarettes did you smoke on an average 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
☐ Less than 1 cigarette
☐ None (0 cigarettes)

26. In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average 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
☐ Less than 1 cigarette
☐ None (0 cigarettes)

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
☐ Less than 1 cigarette
☐ None (0 cigarettes)

28. 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 —————→ **Go to Page 6, Question 31**
☐ Yes

29a. During the 3 months before you got pregnant, how many alcoholic drinks did you have in an average week?

- ☐ 14 drinks or more a week
☐ 7 to 13 drinks a week
☐ 4 to 6 drinks a week
☐ 1 to 3 drinks a week
☐ Less than 1 drink a week
☐ I didn't drink then

29b. During the 3 months before you got pregnant, how many times did you drink 5 alcoholic drinks or more in one sitting?

- ☐ 6 or more times
- ☐ 4 to 5 times
- ☐ 2 to 3 times
- ☐ 1 time
- ☐ I didn't have 5 drinks or more in 1 sitting
- ☐ I didn't drink then

30a. During the last 3 months of your pregnancy, how many alcoholic drinks did you have in an average week?

- ☐ 14 drinks or more a week
- ☐ 7 to 13 drinks a week
- ☐ 4 to 6 drinks a week
- ☐ 1 to 3 drinks a week
- ☐ Less than 1 drink a week
- ☐ I didn't drink then

30b. During the last 3 months of your pregnancy, how many times did you drink 5 alcoholic drinks or more in one sitting?

- ☐ 6 or more times
- ☐ 4 to 5 times
- ☐ 2 to 3 times
- ☐ 1 time
- ☐ I didn't have 5 drinks or more in 1 sitting
- ☐ I didn't drink then

Pregnancy can be a difficult time for some women. The next question is about things that may have happened before and during your most recent pregnancy.

31. This question is about things that may have happened during the 12 months before your new baby was born. For each item, circle **Y** (Yes) if it happened to you or circle **N** (No) if it did not. (It may help to use the calendar.)

	No	Yes
a. A close family member was very sick and had to go into the hospital	N	Y
b. I got separated or divorced from my husband or partner	N	Y
c. I moved to a new address	N	Y
d. I was homeless	N	Y
e. My husband or partner lost his job . . .	N	Y
f. I lost my job even though I wanted to go on working	N	Y
g. I argued with my husband or partner more than usual	N	Y
h. My husband or partner said he didn't want me to be pregnant	N	Y
i. I had a lot of bills I couldn't pay	N	Y
j. I was in a physical fight	N	Y
k. My husband or partner or I went to jail	N	Y
l. Someone very close to me had a bad problem with drinking or drugs	N	Y
m. Someone very close to me died	N	Y

The next questions are about the time during the 12 months before you got pregnant with your new baby.

32a. During the 12 months before you got pregnant, did an ex-husband or ex-partner push, hit, slap, kick, choke, or physically hurt you in any other way?

- ☐ No
- ☐ Yes

32b. During the 12 months before you got pregnant, were you physically hurt in any way by your husband or partner?

- ☐ No
☐ Yes

The next questions are about the time during your most recent pregnancy.

33a. During your most recent pregnancy, did an ex-husband or ex-partner push, hit, slap, kick, choke, or physically hurt you in any other way?

- ☐ No
☐ Yes

33b. During your most recent pregnancy, were you physically hurt in any way by your husband or partner?

- ☐ No
☐ Yes

The next questions are about your labor and delivery. (It may help to look at the calendar when you answer these questions.)

34. When was your baby due?

Month Day Year

35. When did you go into the hospital to have your baby?

Month Day Year

- ☐ I didn't have my baby in a hospital

36. When was your baby born?

Month Day Year

37. When were you discharged from the hospital after your baby was born? (It may help to use the calendar.)

Month Day Year

- ☐ I didn't have my baby in a hospital

38. How was your delivery paid for?

Check all that apply

- ☐ Medicaid
☐ Personal income (cash, check, or credit card)
☐ Health insurance or HMO (including insurance from your work or your husband's work)
☐ Indian Health Service (PHS)
☐ City or county indigent fund
☐ Other Please tell us:

The next questions are about the time since your new baby was born.

39. After your baby was born, was he or she put in an intensive care unit?

- ☐ No
☐ Yes
☐ I don't know

40. After your baby was born, how long did he or she stay in the hospital?

- ☐ Less than 24 hours (less than 1 day)
- ☐ 24 to 48 hours (1 to 2 days)
- ☐ 3 days
- ☐ 4 days
- ☐ 5 days
- ☐ 6 days or more
- ☐ My baby was not born in a hospital
- ☐ My baby is still in the hospital → **Go to Question 43**

41. Is your baby alive now?

- ☐ No → **Go to Question 53**
- ☐ Yes

42. Is your baby living with you now?

- ☐ No → **Go to Question 53**
- ☐ Yes

43. Did you ever breastfeed or pump breast milk to feed your new baby after delivery?

- ☐ No → **Go to Question 47**
- ☐ Yes

44. Are you still breastfeeding or feeding pumped milk to your new baby?

- ☐ No
- ☐ Yes → **Go to Question 46**

45. How many weeks or months did you breastfeed or pump milk to feed your baby?

- Weeks **OR** Months
- ☐ Less than 1 week

46. How old was your baby the first time you fed him or her anything besides breast milk? Include formula, baby food, juice, cow's milk, water, sugar water, or anything else you fed your baby.

Weeks **OR** Months

- ☐ My baby was less than 1 week old
- ☐ I have not fed my baby anything besides breast milk

47. Did anyone suggest that you *not* breastfeed your new baby?

- ☐ No → **Go to Question 49**
- ☐ Yes

48. Who suggested that you *not* breastfeed your new baby?

Check all that apply

- ☐ My husband or partner
- ☐ My mother, father, or in-laws
- ☐ Other family member or relative
- ☐ My friends
- ☐ My baby's doctor, nurse, or other health care worker
- ☐ My doctor, nurse, or other health care worker
- ☐ Other → Please tell us:

If your baby is still in the hospital, go to Question 53.

49. About how many hours a day, on average, is your new baby in the same room with someone who is smoking?

Hours

- ☐ Less than 1 hour a day
☐ My baby is never in the same room with someone who is smoking

50. How do you *most often* lay your baby down to sleep now?

Check one answer

- ☐ On his or her side
☐ On his or her back
☐ On his or her stomach

51. Was your new baby seen by a doctor, nurse, or other health care worker during the first week after he or she left the hospital?

- ☐ No
☐ Yes

52. Has your new baby had a well-baby checkup? (A well-baby checkup is a regular health visit for your baby usually at 2, 4, or 6 months of age.)

- ☐ No
☐ Yes

53. 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 not having sex at certain times [rhythm] or withdrawal, and using birth control methods such as the pill, condoms, cervical ring, IUD, having their tubes tied, or their partner having a vasectomy.)

- ☐ No
☐ Yes →

Go to Question 55

54. What are your or your husband's or partner's reasons for not doing anything to keep from getting pregnant *now*?

Check all that apply

- ☐ I am not having sex
☐ I want to get pregnant
☐ I don't want to use birth control
☐ My husband or partner doesn't want to use anything
☐ I don't think I can get pregnant (sterile)
☐ I can't pay for birth control
☐ I am pregnant now
☐ Other → Please tell us:

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

55. During the *12 months before* your new baby was born, what were the sources of your household's income?

Check all that apply

- ☐ Paycheck or money from a job
☐ Money from family or friends
☐ Money from a business, fees, dividends, or rental income
☐ Aid such as Temporary Assistance for Needy Families (TANF), welfare, WIC, public assistance, general assistance, food stamps, or Supplemental Security Income
☐ Unemployment benefits
☐ Child support or alimony
☐ Social security, workers' compensation, disability, veteran benefits, or pensions
☐ Other → Please tell us:

56. During the 12 months before your new baby was born, what was your total household income before taxes? Include your income, your husband's or partner's income, and any other income you may have used. (All information will be kept private and will not affect any services you are now getting.)

Check one answer

- ☐ Less than \$10,000
☐ \$10,000 to \$14,999
☐ \$15,000 to \$19,999
☐ \$20,000 to \$24,999
☐ \$25,000 to \$34,999
☐ \$35,000 to \$49,999
☐ \$50,000 or more

57. During the 12 months before your new baby was born, how many people, including yourself, depended on this income?

People

58. During the 12 months before your new baby was born, did you participate in any of these programs? Circle Y (Yes) if you did participate or N (No) if you did not.

	No	Yes
a. TANF or Welfare to Work	N	Y
b. New Mexico Food Stamps Program	N	Y

The next questions are about the time before you got pregnant with your new baby.

59. Just before you got pregnant with your new baby, had you ever heard about emergency contraceptive pills (ECPs)? These used to be called the "morning after pill." If taken according to directions within 5 days after unprotected sex, they can prevent a pregnancy.

- ☐ No
☐ Yes
☐ I don't know

60. Just before you got pregnant, did you receive any of your health care from the Indian Health Service (PHS)?

- ☐ No
☐ Yes
☐ I don't know

The next questions are about the time during your most recent pregnancy.

61. This question is about the care of your teeth during your most recent pregnancy. For each item, circle Y (Yes) if it is true or circle N (No) if it is not true.

	No	Yes
a. I had a dental problem	N	Y
b. I went to a dentist or dental clinic.	N	Y
c. A dental or other health care worker talked with me about how to care for my teeth and gums	N	Y

62. During your most recent pregnancy, what was the name of your health insurance?

Check all that apply

- ☐ Cimarron
☐ Lovelace
☐ Presbyterian
☐ Blue Cross/Blue Shield
☐ Indian Health Service (PHS)
☐ Military coverage
☐ I don't have health insurance
☐ I don't know
☐ Other

insurance —————> Please tell us:

63. During pregnancy, you probably had to get different kinds of health-related services. These may have included clinic visits, doctor's or nurse's office visits, applying for health insurance, applying for Medicaid, or getting help for a family problem. Did you ever feel you were treated unfairly in getting these kinds of services because of any of the following? Circle Y (Yes) if you were treated unfairly or N (No) if you were treated fairly.

- | | No | Yes |
|---|----|-----|
| a. Your race | N | Y |
| b. Your age | N | Y |
| c. Your language | N | Y |
| d. Your citizenship | N | Y |
| e. Your inability to pay | N | Y |
| f. I felt unfairly treated but don't know why | N | Y |
| g. I have not been treated unfairly. | N | Y |
| h. I felt unfairly treated for other reasons | N | Y |

Please tell us:

64. During your most recent pregnancy, did you participate in any of these services? Circle Y (Yes) if you did participate or N (No) if you did not.

- | | No | Yes |
|--|----|-----|
| a. Breastfeeding class or support group . . . | N | Y |
| b. Parenting class or support group | N | Y |
| c. Nutrition class or discussion group . . . | N | Y |
| d. Counseling about a personal or family problem | N | Y |
| e. Home visiting services by a nurse, social worker, or other health care worker | N | Y |
| f. A program for pregnant or parenting teens | N | Y |
| g. Families FIRST | N | Y |
| h. Program for protection from family violence | N | Y |
| i. Program to stop using drugs or alcohol | N | Y |
| j. A class or support group to stop smoking cigarettes | N | Y |
| k. I did not participate in any of the above | N | Y |

The next questions are about the time since your new baby was born.

65. *Since your new baby was born, have you participated in any of these services?* Circle Y (Yes) if you did participate or N (No) if you did not.

- | | No | Yes |
|--|----|-----|
| a. Breastfeeding class or support group . . . | N | Y |
| b. Parenting class or support group . . . | N | Y |
| c. Nutrition class or discussion group . . . | N | Y |
| d. Counseling about a personal or family problem | N | Y |
| e. Home visiting services by a nurse, social worker, or other health care worker | N | Y |
| f. A program for pregnant or parenting teens | N | Y |
| g. Families FIRST | N | Y |
| h. Program for protection from family violence | N | Y |
| i. Program to stop using drugs or alcohol | N | Y |
| j. A class or support group to stop smoking cigarettes | N | Y |
| k. I did not participate in any of the above | N | Y |

66. *Since your new baby was born, have you seen a doctor, nurse, or midwife for yourself for any of these reasons?* Circle Y (Yes) if you did or N (No) if you did not.

- | | No | Yes |
|--|----|-----|
| a. I received a routine checkup (6 weeks after delivery) | N | Y |
| b. I received care for a health problem . . . | N | Y |
| c. I received a birth control method . . . | N | Y |

If your baby is no longer alive or is not living with you, go to Question 73.

67. Do you have an infant car seat(s) for your new baby?

- ☐ No
☐ Yes

68. *Since your new baby was born, have you or your baby received any home visiting services by a nurse, social worker, or other health care worker?*

- ☐ No
☐ Yes

Go to Question 70

69. *Since your new baby was born, how many times have you or your baby received home visiting services?*

Check one answer

- ☐ Only once
☐ 2 or 3 times
☐ 4 or more times

70. *Since your new baby was born, whom have you counted on for support or help?* Include those you often rely on for housekeeping, childcare, money, or help with problems. Circle Y (Yes) if you can count on the person(s) or N (No) if you cannot.

- | | No | Yes |
|---|----|-----|
| a. My husband or partner | N | Y |
| b. A family member, friend, or neighbor | N | Y |
| c. A paid sitter or nanny | N | Y |
| d. Day-care center staff | N | Y |
| e. Someone else | N | Y |
- Please tell us who:

- f. I cannot count on anyone N Y

71. Are you currently in school or working outside the home?

- ☐ No —————→ **Go to Question 73**
☐ Yes

72. At your *current* workplace or school, what happens when a mother wants to breastfeed?

Check all that apply

- ☐ She can breastfeed the baby as needed
☐ She can use break time to breastfeed the baby
☐ She can use break time to pump milk
☐ It is hard to use breaks or find a place to pump or breastfeed
☐ She is not allowed to breastfeed the baby at work
☐ I don't know

73. Which of the following things were you doing in the *past month*?

Check all that apply

- ☐ Being a homemaker
☐ Was unemployed
☐ Seasonal farm or construction work
☐ Working or going to school *full-time*
☐ Working or going to school *part-time*
☐ Other —————→ Please tell us:

74a. Since your new baby was born, how often have you felt down, depressed, or hopeless?

- ☐ Always
☐ Often
☐ Sometimes
☐ Rarely
☐ Never

74b. Since your new baby was born, how often have you had little interest or little pleasure in doing things?

- ☐ Always
☐ Often
☐ Sometimes
☐ Rarely
☐ Never

75. During the *past 12 months*, which one of the following statements *best* describes the food eaten by you and your family?

Check one answer

- ☐ Enough food to eat
☐ Sometimes not enough food to eat
☐ Often not enough food to eat

76. Which of the following utilities do you have in your house, apartment, trailer, or hogan? For each item, circle **Y** (Yes) if you have the utility or circle **N** (No) if you do not have the utility.

No Yes

- a. Complete plumbing facilities (including hot and cold running water, a flush toilet, and a bathtub or shower) N Y
 b. Electricity N Y
 c. A telephone from which you can make and receive calls (including cell phones) N Y

77. What is today's date?

Month Day Year

NOTE: If you are unable to read or understand the instructions, please ask a helper for assistance.

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

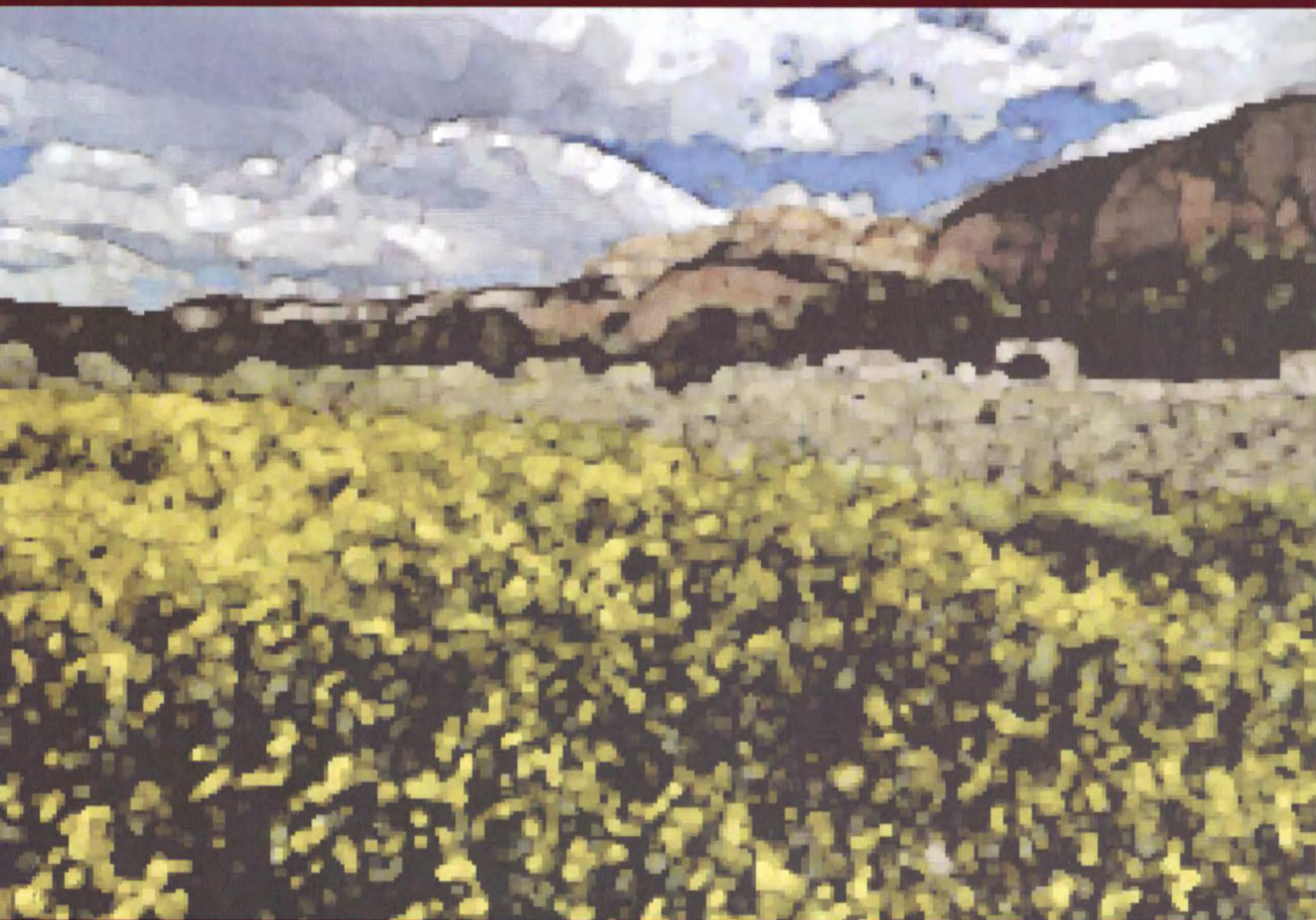
Thanks for answering our questions!

Your answers will help us work to make New Mexican mothers and babies healthier.

February 26, 2004

REPORT ON NEW MEXICO NAVAJO MOTHERS AND THEIR INFANTS, 2000-2004

Based on New Mexico Pregnancy Risk Assessment Monitoring System (PRAMS)
Surveillance Data



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