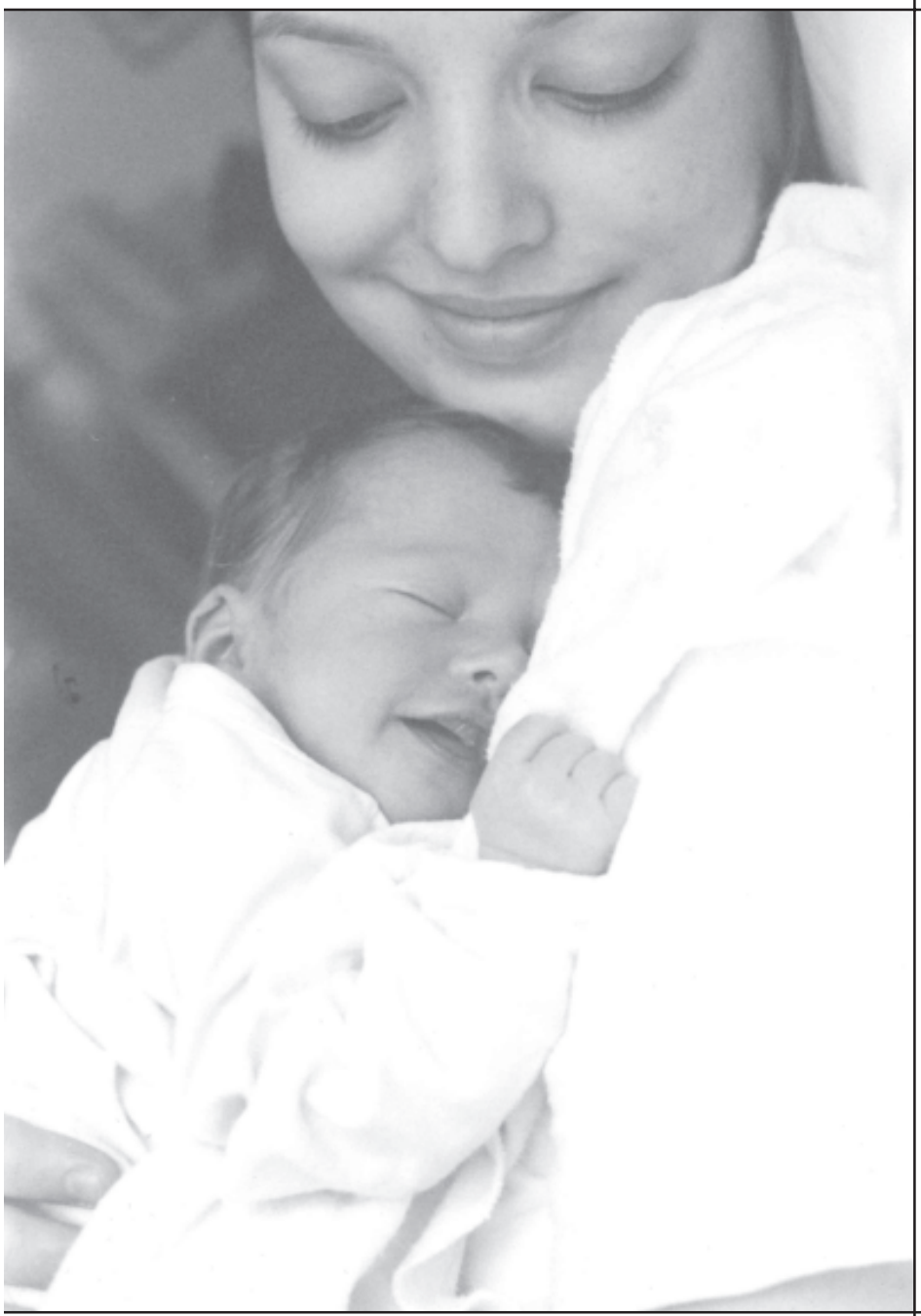
North Dakota PRAMS - 2002 Survey Results

Detailed results of the 2002 Pregnancy Risk Assessment Monitoring System survey about mothers and babies in North Dakota

Issued:
December 2004



Prepared for:
North Dakota PRAMS,
Division of Maternal and Child Health,
North Dakota Department of Health
in Bismarck, North Dakota

Prepared by:
North Dakota State Data Center
at North Dakota State University,
an Equal Opportunity Institution
in Fargo, North Dakota

Kay Schwarzwalter
Ramona Danielson
Dr. Richard Rathge, Director

Available online at:
http://www.ndsu.edu/sdc/data/ndprams.htm

North Dakota State Data Center at North Dakota State University
IACC Building, Room 424
PO Box 5636
Fargo, North Dakota 58105

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FORWARD

The overall goal of the Pregnancy Risk Assessment Monitoring System (PRAMS) is to reduce infant morbidity and mortality by impacting policies and maternal behaviors during pregnancy and early infancy. It is anticipated that information from PRAMS will lead to improvements in the health of mothers and infants in North Dakota. The major objectives for the PRAMS project are three-fold: a) to collect population-based data of high scientific quality on topics relating to pregnancy and early infancy, b) to conduct analyses in order to increase understanding of maternal behaviors and experiences during pregnancy and early infancy and their relationship to health outcomes, and c) to translate results from analyses into usable information for planning and evaluation of public health programs and policy.

For more information about PRAMS, contact:

Kay Schwarzwalter, Project Coordinator
North Dakota State Data Center
701-231-1058
kay.schwarzwalter@ndsu.edu

or

Terry Bohn, Project Director
North Dakota Department of Human Services
701-328-4963
tbohn@state.nd.us

The "North Dakota PRAMS – 2002 Survey Results" report is available online at: http://www.ndsu.edu/sdc/data/ndprams.htm.

ACKNOWLEDGMENTS

The North Dakota State Data Center is appreciative of the opportunity provided by the North Dakota Department of Health and the Centers for Disease Control and Prevention to conduct the North Dakota PRAMS project. The PRAMS project is a significant undertaking resulting from the vision and leadership of numerous individuals and governing bodies. It is important to acknowledge those who have dedicated time and energy to ensure that thoughtful planning and long-range vision serve as the basis for policy and decision-making regarding the health of mothers and infants in North Dakota. Thank you to:

John Hoeven, Governor
Terry Dwelle, MD, State Health Officer
John Joyce, MD, Chief, Community Health Section

PRAMS Steering Committee Members:

Region Representatives
Holly Mayer-Taft, RN, C, Director, Public Health Nursing, IHS Minne-Tohe Health Center, New Town, ND (Region I)
Dianne Hiltner, LSW, First District Health Unit, Minot, ND (Region II)
Sandeep Patel, MD, MPH, Quentin N. Burdick Memorial Healthcare Facility, Belcourt, ND (Region III)
Tracy Evanson, PhD, RN, CS, University of North Dakota College of Nursing, Grand Forks, ND (Region IV)
Rachel Disrud, Vice Chair 2004 (1st Term), Fargo, ND (Region V)
Sharon Buhr, LRD, MPH, Public Health Nutritionist, Mercy Hospital of Valley City, Valley City, ND (Region VI)
Barb Arnold-Tengesdahl, NDAEYC, Voices for North Dakota's Children, Bismarck, ND (Region VII)
Lynette Canode, Region VIII Health Tracks Coordinator, Badlands Human Service Center, Dickinson, ND (Region VIII)

Local Health Departments
Carlotta Ehlis, Administator, Southwestern District Health Unit, Dickinson, ND

Primary Care Association
Melissa Craig, Office Manager, Community Healthcare Association of the Dakotas, Bismarck, ND

Special Needs
Sharon Schwindt, Health Coordinator/Head Start Nurse, Bismarck Early Childhood Education Program (BECEP), Bismarck, ND

North Dakota Department of Health
Sandy Anseth, Executive Administrator, Community Health Section Administration (Retired)
Carmell Barth, Research Analyst, Division of Vital Records
Clint Boots, Research Analyst, Division of Tobacco Prevention
Ros Norstedt, Administrative Assistant, Community Health Section Administration
Karen Oby, MCH/WIC Nutrition Services Director, Division of Nutrition and Physical Activity (Retired)
Colleen Pearce, MCH/WIC Nutrition Services Director, Division of Nutrition and Physical Activity
Toni Vetter, Director, Optimal Pregnancy Outcome Program, Division of Family Health

North Dakota Department of Human Services
Terry Bohn, SSDI Coordinator, Children's Special Needs Services
Delores Friedt, Coordinator, Birth and Adoption Services, Division of Children and Family Services

Ad Hoc Member
Kay Schwarzwalter, Survey Specialist, North Dakota State Data Center, Fargo, ND

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INTRODUCTION

PRAMS is part of the Centers for Disease Control and Prevention (CDC) initiative to reduce infant mortality and low birthweight. PRAMS is an ongoing, population-based risk factor surveillance system designed to identify and monitor selected maternal experiences and behaviors that occur before and during pregnancy and the child's early infancy among a stratified sample of mothers delivering a live birth.

Epidemiologic surveillance is the ongoing and systematic collection, analysis, and interpretation of health data used for describing and monitoring a health event or behaviors associated with a health event or condition. This information is used for planning, implementing, and monitoring health programs and for informing policy.

The decision to develop the PRAMS surveillance system was based on research that showed:

- The U.S. infant mortality rate was no longer declining as rapidly as it had in past years.
- The prevalence of low birthweight was showing little change.
- Maternal behaviors such as smoking, drug and alcohol use, and limited use of prenatal and pediatric care were contributing to the slow rate of decline.

PRAMS was initiated to help state health departments establish and maintain an epidemiologic surveillance system of selected maternal behaviors and experiences. PRAMS was designed to supplement data from vital records and to generate data for planning and assessing perinatal health programs in each participating state. Findings from PRAMS are meant to be used to enhance our understanding of maternal behaviors and their relationship with adverse pregnancy outcomes. PRAMS data can also be used to aid in the development and assessment of programs designed to identify high-risk pregnancy and reduce adverse pregnancy outcomes and to inform policy in each participating state.

This report, "North Dakota PRAMS - 2002 Survey Results," represents the findings of a surveillance of statewide births in North Dakota for 2002.

METHODOLOGY

PRAMS, the Pregnancy Risk Assessment Monitoring System, is a surveillance project of the Centers for Disease Control and Prevention (CDC) and state health departments. An explanation of the project and detailed methodology are available on the CDC's website at http://www.cdc.gov/reproductivehealth/srv_prams.htm. Much of the following description about PRAMS and methodology comes verbatim from that website.

PRAMS was initiated in 1987 because national infant mortality rates were no longer declining as rapidly as they had in prior years. In addition, the incidence of low birthweight infants had changed little in the previous 20 years. Research has indicated that maternal behaviors during pregnancy may influence infant birthweight and mortality rates. The goal of the PRAMS project is to improve the health of mothers and infants by reducing adverse outcomes such as low birthweight, infant mortality and morbidity, and maternal morbidity. PRAMS provides state-specific data for planning and assessing health programs and for describing maternal experiences that may contribute to maternal and infant health.

Thirty-one states and New York City currently participate in PRAMS (see Figure 1). North Dakota and Montana are the first PRAMS states to employ a point-in-time (rather than ongoing) PRAMS survey data collection. The point-in-time system was intended to allow states with smaller population bases and fewer resources to benefit from PRAMS data collection. The North Dakota Department of Health in Bismarck, North Dakota, contracted with the North Dakota State Data Center (NDSDC) at North Dakota State University (NDSU) in Fargo, North Dakota, to provide the expertise in data collection, data entry, and data analysis. The project has been conducted according to Institutional Review Board requirements of NDSU and the CDC. The point-in-time system and this cooperative arrangement have proven successful in North Dakota, and the North Dakota Department of Health and the NDSDC will apply to the CDC for a grant in 2005 that would provide for ongoing data collection in North Dakota beginning in 2006.

PRAMS collects state-specific, population-based data on maternal attitudes and experiences prior to, during, and immediately following pregnancy. PRAMS provides data for researchers to use to improve the health of mothers and infants. PRAMS allows CDC and the states to monitor changes in maternal and child health indicators (e.g., unintended pregnancy, prenatal care, breastfeeding, smoking, drinking, infant health). PRAMS enhances information from birth certificates used to plan and review state maternal and infant health programs.

The PRAMS questionnaire included core questions that are asked by all the states and state-specific questions that are chosen or developed by individual states. The core portion of the questionnaire included questions about the following:

- Attitudes and feelings about the most recent pregnancy
- Content and source of prenatal care
- Maternal alcohol and tobacco consumption
- Physical abuse before and during pregnancy
- Pregnancy-related morbidity
- Infant health care
- Maternal living conditions
- Mother's knowledge of pregnancy-related health issues, such as adverse effects of tobacco and alcohol and risks of HIV

The PRAMS questionnaire consists of two parts. First, there are the core questions that appear on each state's survey. Second, states may tailor their questionnaire to meet state needs by drawing additional questions from a pre-tested list of standard questions or by developing questions on their own. North Dakota added some questions about smoking and secondhand smoke issues, as well as a question regarding recall of the statewide "Never, Never Shake a Baby" educational campaign.

The PRAMS sample is chosen from all women who have had a live birth "recently," so findings can be applied to the state's entire population of women who have recently delivered a liveborn infant. PRAMS is designed to not only provide state-specific data but also to allow comparisons among participating states because the same data collection methods are used in all states. PRAMS provides data not available from other sources about pregnancy and the first few months after birth. These data can be used to identify groups of women and infants at high risk for health problems, monitor changes in health status, and measure progress towards goals in improving the health of mothers and infants. PRAMS data are used by state and local governments to plan and review programs and policies aimed at reducing health problems among mothers and babies. PRAMS data are used by state agencies to identify other agencies that have important contributions to make in planning maternal and infant health programs and develop partnerships with those agencies.

The PRAMS sample of women who have had a recent live birth is drawn from the state's birth certificate file. Participating states usually sample between 1,300 and 3,400 women for an entire year. As a point-in-time state, North Dakota sampled birth certificate records for women who delivered from January 1, 2002 through April 30, 2002. Women from some groups, or "strata," can be sampled at a higher rate to ensure adequate data are available in smaller but higher risk populations; North Dakota chose to sample mothers who received Medicaid. North Dakota sampled a total of 1,245 North Dakota mothers of babies born in North Dakota. A total of 909 responses were achieved, for an overall response rate of 73 percent, surpassing the minimum 70 percent response rate required by the CDC. Typically, the annual sample is large enough for estimating statewide risk factor proportions within an error rate of 3.5 percent at 95 percent confidence. Estimated proportions within strata are slightly less precise (typically, they are estimated within a 5 percent error rate at 95 percent confidence). North Dakota did not reach a 70 percent response rate within the Medicaid stratum, and thus these data were not analyzed separately. This stratum, and others, can be explored in future on-going data collection efforts. A 70 percent response rate within strata can be achieved more easily in the future with a better system for locating addresses and phone numbers for these often at-risk, and harder to reach, mothers. Successful examples from other PRAMS projects include data-sharing agreements with the Women, Infant, and Children (WIC) program, Medicaid, and other state agencies.

The process for soliciting a high response rate involves both mailings and telephone calls. Selected women are first contacted by mail. If there is no response to repeated mailings, women are contacted and interviewed by telephone. Here is the sequence of contacts for PRAMS surveillance:

1. **Preletter.** This letter introduces PRAMS to the mother and informs her that a questionnaire will soon arrive.

2. **Initial Mail Questionnaire Packet.** This packet is sent to all sampled mothers three to seven days after the preletter. Its contents are described below.

3. **Tickler.** The tickler serves as a thank you and reminder note. It is sent seven to 10 days after the initial mail packet.

4. **Second Mail Questionnaire Packet.** This packet is sent to all sampled mothers who have not yet responded seven to 14 days after the tickler has been sent.

5. **Third Mail Questionnaire Packet** (Optional). This third packet is sent to all remaining nonrespondents 7 to 14 days after the second questionnaire.

6. **Telephone Follow-up.** Telephone follow-up is initiated for all mail nonrespondents seven to 14 days after mailing the last questionnaire.

The series of mailings commences two to four months after delivery. The questionnaire contains items asking about the early postpartum period; thus, the mailings are timed to ensure that all

women will be able to respond for this period. The data collection cycle from the mailing of the preletter to the close of telephone follow-up lasts approximately 60 to 70 days. Each month, a stratified sample is drawn from the current birth certificate file. For each of these monthly samples, or batches, this sequence of contacts is attempted. In North Dakota, the preletters and initial mail questionnaire packets were sent to mothers with January births in May 2004. Four batches of birth certificate records were drawn, with final data collection occurring in August of 2004. To assist in tracking all aspects of data collection, a customized tracking system, PRAMTrac, was developed by the CDC and installed in each participating state. PRAMTrac is designed to assist with the scheduling of mailings and telephone calls, preparing letters, and tracking responses. Another system developed by the CDC and installed in each participating state is QDS, the software for hand data entry of mail surveys.

The mail packets contain several items. First is a multipurpose cover letter. This letter describes PRAMS and its purpose, explains how the mother was chosen and why, elicits the mother's cooperation, describes the procedures for filling out and returning the questionnaire, explains any incentive or reward, and provides a telephone number for additional information. This letter is modified slightly for the second and third mailings, primarily by adding an additional appeal for response. Second, the questionnaire booklet is included. The questionnaire booklet has a similar appearance for each state. It is 14 pages in length, has a colorful cover designed by each state, and is slightly smaller than an 8 1/2" by 11" sheet of paper. It contains an extra page at the end for comments from the mother. A self-addressed return envelope with postage is provided for the easy return of the questionnaire. Third, a question and answer brochure is added to provide additional information about PRAMS. It contains answers to the most frequently asked questions about the survey. It can be an important tool to convince the mother to participate. Fourth, a calendar is provided to be used as a memory aid for answering the questions. Fifth, all states have adopted the use of some type of participation incentive (sent to all sampled mothers) or reward (sent to all respondents). Examples of participation incentives and rewards include: coupons for certified birth certificates, participation in a raffle for a cash award, postage stamps, bibs, cash (a dollar bill), and magnetic picture frames. North Dakota used a 30-minute telephone calling card as its participation incentive, which was sent to all sampled mothers along with the initial mail questionnaire packet.

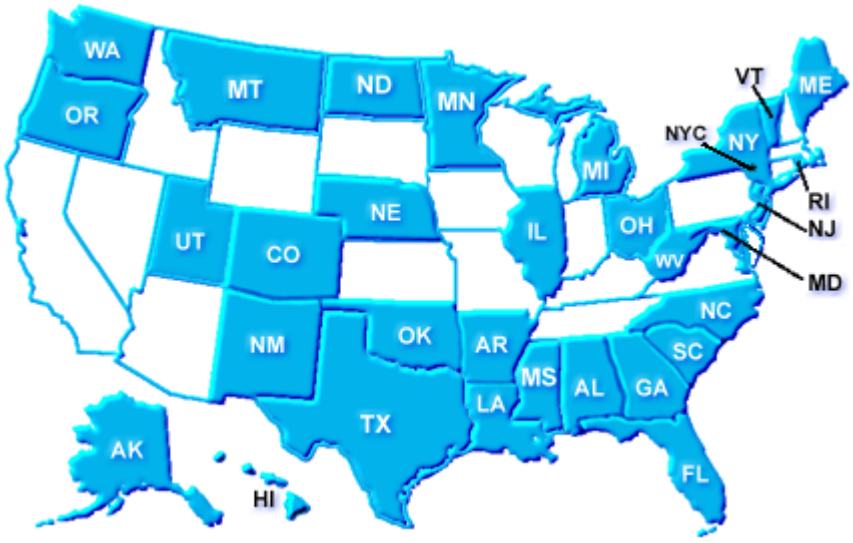
Telephone follow-up begins after the mailing of the last questionnaire. A variety of sources of telephone numbers are used to obtain a valid number for a mother, and these vary by state. For North Dakota, on-line internet directories were the primary source of numbers. Calls to a particular number are staggered over different times of the day and different days of the week. The calling period for a batch runs two to three weeks. Up to 15 call attempts are made to a number in order to reach a mother. Often, telephone interviewers arrange call-back interviews to accommodate the mother’s schedule. The overall goal of the repeated mailings and follow-up phone calls is a minimum 70 percent response rate of sampled mothers.

Mothers' responses are linked to extracted birth certificate data items for analysis. Thus the PRAMS data set also contains a wealth of demographic and medical information collected through the state's vital records system. The availability of this information for all births is the basis for drawing stratified samples and, ultimately, for generalizing results to the state's entire population of births. A complex weighting scheme is calculated by CDC statisticians and applied to the data to allow for generalizability. For each respondent, the initial sampling weight is the reciprocal of the sampling fraction applied to the stratum. Nonresponse adjustment factors attempt to compensate for the tendency of women having certain characteristics (such as being unmarried or having less education) to respond at lower rates than women without those characteristics. The frame noncoverage weights are derived by comparing frame files for a year of births to the calendar year birth tape that states provided to CDC. The effect of the noncoverage weights is to bring totals estimated from sample data in line with known totals from the birth tape. For states with ongoing data collection, the sampling, nonresponse, and noncoverage components of the weight are multiplied together to yield the analysis weight. However, point-in-time data collection requires an additional weight be factored in which adjusts the four months of birth tape records to a full year timespan. Once the analysis weight is applied,

the weighted data can be interpreted as the number of women like herself in the population that each respondent represents.

Analyzing PRAMS data requires software that takes into account the complex sampling designs that states employ. Such software utilizes first-order Taylor series approximations to calculate appropriate standard errors for the estimates it produces. North Dakota State Data Center staff attended training provided by the CDC in Atlanta, Georgia, for use of SUDAAN software which appropriately addresses the complex sampling design. Percentages are presented with 95 percent confidence intervals (CI) which are computed by multiplying the standard error by 1.96, then adding and subtracting that number from the percentage. Confidence intervals assist in interpretation; while a percentage is a useful point estimate, the user can be 95 percent confident that the actual number is within the range of the confidence interval – a range that may vary from a few percentage points to many percentage points, especially when dealing with few responses.

Figure 1. Map of PRAMS Participating States



Throughout this report the reader will notice that much of the data are analyzed by Medicaid status, WIC status, and Gravid (primipara and multipara) status. Primiparas are mothers who have not had a previous birth whereas multiparas refer to mothers who have had one or more previous births. Respondents who were multiparas were encouraged to focus on their most recent pregnancy. In addition, respondents who had multiple births were encouraged to focus on only the experiences of the infant selected in the sampling. The unit of analysis is the mother. Only those mothers who gave birth to a live infant are included in the analyses.

REFERENCE TABLE 1.

- Table 1 represents the profile of the total sample, including those who completed and those who did not complete the survey, as well as a profile of the total statewide births in 2002 provided by the North Dakota Division of Vital Records. The Centers for Disease Control and Prevention implemented a complex weighting scheme for the sample. This statistical approach ensures the sample is representative of all statewide births. Because the data represented in Table 1 lack the weighting scheme, data in this table should not be used for analysis purposes. However, when making comparisons with the total statewide births, the data do provide a good reflection overall.

- The proportions of mothers who responded to the survey closely resemble the proportions of total statewide births in all characteristic categories. At-risk mothers were less likely to respond and were typically younger mothers, less educated mothers, and Native American mothers.

Table 1. Profile of Total Sample and Total Statewide Births, 2002 in North Dakota

	2002 Sample						Total statewide births for 2002**	
	Completed survey (not weighted for analysis)		Did not complete survey		Total sample			
Characteristics	N	%	N	%	N	%	N	%
Mother's age								
Less than 15 years	0	0.0	2	0.6	2	0.2	5	0.1
15 to 19 years	70	7.7	50	14.9	120	9.6	652	8.4
20 to 24 years	262	28.8	135	40.2	397	31.9	2,072	26.7
25 to 29 years	285	31.4	76	22.6	361	29.0	2,431	31.3
30 to 34 years	206	22.7	41	12.2	247	19.8	1,718	22.2
35 to 39 years	76	8.4	26	7.7	102	8.2	723	9.3
40 to 44 years	10	1.1	6	1.8	16	1.3	143	1.8
45 or more years	0	0.0	0	0.0	0	0.0	11	0.1
TOTAL	*909*	*100.1*	*336*	*100.0*	*1,245*	*100.0*	*7,755*	*99.9*
Mother's education								
8 years or less	3	0.3	9	2.7	12	1.0	81	1.0
9 to 11 years	69	7.6	64	19.0	133	10.7	596	7.7
12 years	242	26.7	125	37.2	367	29.5	2,056	26.6
13 to 15 years	277	30.6	97	28.9	374	30.1	2,486	32.2
16 or more years	315	34.8	41	12.2	356	28.7	2,505	32.4
TOTAL	*906*	*100.0*	*336*	*100.0*	*1,242*	*100.0*	*7,724*	*99.9*
Father's education								
8 years or less	1	0.1	9	3.3	10	0.9	54	0.8
9 to 11 years	54	6.5	38	13.8	92	8.3	410	5.8
12 years	257	30.8	111	40.4	368	33.2	2,201	31.3
13 to 15 years	235	28.1	75	27.3	310	27.9	2,164	30.8
16 or more years	288	34.5	42	15.3	330	29.7	2,199	31.3
TOTAL	*835*	*100.0*	*275*	*100.1*	*1,110*	*100.0*	*7,028*	*100.0*
Mother's race								
White	806	88.8	225	67.0	1031	82.9	6,643	85.7
Native American	81	8.9	97	28.9	178	14.3	814	10.5
Black	11	1.2	5	1.5	16	1.3	88	1.1
Other	10	1.1	9	2.7	19	1.5	210	2.7
TOTAL	*908*	*100.0*	*336*	*100.1*	*1,244*	*100.0*	*7,755*	*100.0*
Mother's marital status*								
Married	663	72.9	162	48.2	825	66.3	5,501	70.9
Not married	246	27.1	174	51.8	420	33.7	2,254	29.1
TOTAL	*909*	*100.0*	*336*	*100.0*	*1,245*	*100.0*	*7,755*	*100.0*

*Regarding mother's marital status for percentage of total statewide births, the category "not married" is composed of 29.0 percent listed as "other" and 0.1 percent listed as "unknown."
**Total statewide births reflect birth certificate data provided by the North Dakota Division of Vital Records.

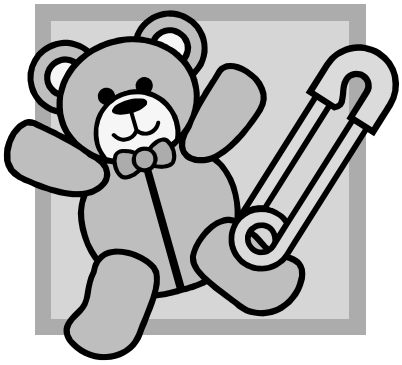
REFERENCE TABLE 2.

- Table 2 represents the weighted analyses of respondents who completed the survey and the total statewide births. Similar to Table 1 (unweighted data), data from Table 2 (weighted data) are reflective of the total statewide births. For example, of all births in 2002, 32.4 percent of mothers had 16 or more years of education. In the unweighted sample, 34.8 percent of respondents had 16 years or more. Once weighted, 37.0 percent of respondents had 16 or more years of education. When looking at statewide births, 85.7 percent of mothers were white. The race of respondents in the unweighted data and the weighted data (88.8 percent and 89.6 percent, respectively) were again reflective of the state totals.

Table 2. Profile of Respondents Who Completed the Survey and Total Statewide Births

Characteristics	Respondents who completed the survey (weighted for analysis)		Total statewide births for 2002**	
	%	95% CI	N	%
Mother's age				
Less than 15 years	0.0	*(0.0,0.0)*	5	0.1
15 to 19 years	8.3	*(6.3,10.3)*	652	8.4
20 to 24 years	25.8	*(23.1,28.4)*	2,072	26.7
25 to 29 years	32.2	*(29.2,35.2)*	2,431	31.3
30 to 34 years	23.9	*(21.1,26.6)*	1,718	22.2
35 to 39 years	8.7	*(6.9,10.5)*	723	9.3
40 to 44 years	1.2	*(0.5,1.9)*	143	1.8
44 years or older	0.0	*(0.0,0.0)*	11	0.1
TOTAL	100.1		7,755	99.9
Mother's education				
8 years or less	0.2	*(0.0,0.4)*	81	1.0
9 to 11 years	7.5	*(5.7,9.3)*	596	7.7
12 years	26.0	*(23.2,28.9)*	2,056	26.6
13 to 15 years	29.3	*(26.4,32.2)*	2,486	32.2
16 or more years	37.0	*(34.0,39.9)*	2,505	32.4
TOTAL	100.0		7,724	99.9
Father's education				
8 years or less	0.1	*(0.0,0.2*	54	0.8
9 to 11 years	6.1	*(4.4,7.7)*	410	5.8
12 years	29.0	*(26.1,32.0)*	2,201	31.3
13 to 15 years	28.6	*(25.6,31.6)*	2,164	30.8
16 or more years	36.3	*(33.1,39.4)*	2,199	31.3
TOTAL	100.1		7,028	100.0
Mother's race				
White	89.6	*(87.6,91.5)*	6,643	85.7
Native American	8.1	*(6.3,9.8)*	814	10.5
Black	1.4	*(0.6,2.0)*	88	1.1
Other	1.0	*(0.4,1.7)*	210	2.7
TOTAL	100.1		7,755	100.0
Mother's marital status*				
Married	76.1	*(73.5,78.7)*	5,501	70.9
Not married	23.9	*(21.3,26.5)*	2,254	29.1
TOTAL	100.0		7,755	100.0

*Regarding mother's marital status for percentage of total statewide births, the category "not married" is composed of 29.0 percent listed as "other" and 0.1 percent listed as "unknown."
**Total statewide births reflect birth certificate data provided by the North Dakota Division of Vital Records.



Respondent Profile

What moms had to say:

"Concerns about a single mother like me, working most of the time and hard-up, working so hard to support kids and to pay bills. I 'm glad and thankful for this opportunity for your concern about babies and moms. It's really a great pleasure for me to answer these questions. Thanks a lot."

"I think what you guys are doing is great. Keep up the good work. I hope there are things you can change and improve. Thanks."

"I think it's wonderful that there's people out there that care so much and try so hard to make change, because people don't really know what to do until they experience themselves. I never realized the importance, never even thought about things like these until I had my baby. Now I read books, ask lots of questions – it's a huge responsibility having a baby. Yet also very rewarding at the same time. God Bless You."

"I think this is a wonderful tool to help mothers + babies. I feel that if there is more education out there, babies would be healthier. And new or young mothers will feel more prepared."

REFERENCE TABLE 1.

- One-third of respondents were 25 to 29 years of age (32.2 percent). The average age of respondents was 27 (data not shown).
- Ten percent of respondents were 35 years and older, while 8 percent were 19 years and younger.
- The levels of education were similar among both mothers and fathers, with two out of three having had at least some college (66.3 percent and 64.9 percent, respectively).
- The racial distribution of respondents generally reflects the overall racial distribution in North Dakota. Ninety percent of respondents were white, 8 percent were Native American, and 2 percent were an other race.
- One-fourth of respondents were not married (23.9 percent).
- One-fourth of respondents were Medicaid recipients (27.3 percent).
- One-third of respondents were WIC recipients (36.3 percent).
- A slight majority of respondents were multiparas (i.e., had previous live births) (57.4 percent). Two out of five respondents were primiparas (i.e., first-time mothers) (42.6 percent).
- Proportions of respondents who lived in urban areas were similar to proportions in rural areas (i.e., outside of city limits as defined by the North Dakota Division of Vital Records).
- Two-thirds of respondents said their primary payment source for birth was Blue Cross/Blue Shield or another private insurance, while one-fifth indicated Medicaid paid for their infant's birth (21.9 percent).

Table 1. Respondent Profile

Respondent characteristics from infant's birth certificate	%	95% CI
Mother's age		
Less than 15 years	0.0	*(0.0,0.0)*
15 to 19 years	8.3	*(6.3,10.3)*
20 to 24 years	25.8	*(23.1,28.4)*
25 to 29 years	32.2	*(29.2,35.2)*
30 to 34 years	23.9	*(21.1,26.6)*
35 to 39 years	8.7	*(6.9,10.5)*
40 to 44 years	1.2	*(0.5,1.9)*
44 to 54 years	0.0	*(0.0,0.0)*
TOTAL %	100.1	
Mother's education		
8 years or less	0.2	*(0.0,0.4)*
9 to 11 years	7.5	*(5.7,9.3)*
12 years	26.0	*(23.2,28.9)*
13 to 15 years	29.3	*(26.4,32.2)*
16 or more years	37.0	*(34.0,39.9)*
TOTAL %	100.0	

Respondent characteristics from infant's birth certificate	%	95% CI
Father's education		
8 years or less	0.1	*(0.0,0.2)*
9 to 11 years	6.1	*(4.4,7.7)*
12 years	29.0	*(26.1,32.0)*
13 to 15 years	28.6	*(25.6,31.6)*
16 or more years	36.3	*(33.1,39.4)*
TOTAL %	100.1	
Mother's race		
White	89.6	*(87.6,91.5)*
Native American	8.1	*(6.3,9.8)*
Black	1.4	*(0.6,2.2)*
Other	1.0	*(0.4,1.7)*
TOTAL %	100.1	
Mother's marital status		
Married	76.1	*(73.5,78.7)*
Unmarried	23.9	*(21.3,26.5)*
TOTAL %	100.0	
Medicaid status		
Medicaid*	27.3	*(25.4,29.2)*
Non-Medicaid	72.7	*(70.8,74.6)*
TOTAL %	100.0	
WIC status		
WIC	36.3	*(33.5,39.1)*
Non-WIC	63.7	*(60.9,66.5)*
TOTAL %	100.0	
Gravid status		
Primipara	42.6	*(39.4,45.8)*
Multipara	57.4	*(54.2,60.6)*
TOTAL %	100.0	
Urban/rural residence		
Urban	46.3	*(43.1,49.5)*
Rural	53.7	*(50.5,56.9)*
TOTAL %	100.0	
Primary payment source for birth		
Blue Cross/Blue Shield	52.6	*(49.7,55.4)*
Other private insurance	14.4	*(12.1,16.7)*
Medicaid	21.9	*(21.3,22.4)*
Other government insurance	8.4	*(6.5,10.4)*
Private pay	2.8	*(1.6,3.9)*
TOTAL %	100.1	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or that Medicaid paid for prenatal care or the delivery.

REFERENCE TABLES 2-3.

- Medicaid status of respondents:
  - Medicaid recipients were more likely to be not married than married (57.8 percent and 42.2 percent, respectively). Non-Medicaid recipients were more likely to be married than Medicaid recipients (89.7 percent and 42.2 percent, respectively).
  - One-half of Medicaid recipients were employed or in school at the time of the survey (54.0 percent).
  - A higher proportion of non-Medicaid than Medicaid recipients were employed or in school (63.3 percent and 54.0 percent, respectively).

- WIC status of respondents:
  - Of WIC recipients, similar proportions existed among those who were married and those who were not married (54.4 percent and 45.6 percent, respectively).
  - Non-WIC recipients were more likely to be married than WIC recipients (88.8 percent and 54.4 percent, respectively).
  - Of WIC recipients, similar proportions existed among those who were employed or going to school and those who were not (52.5 percent and 47.5 percent, respectively).
  - Non-WIC recipients were more likely to be employed or going to school than WIC recipients (64.9 percent and 52.5 percent, respectively).

- Gravid status of respondents:
  - Two-thirds of primiparas were married (64.9 percent). A higher proportion of multiparas, four out of five, were married (84.9 percent).
  - Two-thirds of primiparas were employed or in school at the time of the survey (69.5 percent). A smaller proportion of multiparas, one-half, were employed or in school at the time of the survey (53.8 percent).

Table 2. Medicaid, WIC, and Gravid Status by Marital Status

	Married		Not married		TOTAL %
	%	95% CI	%	95% CI	
Medicaid status					
Medicaid*	42.2	*(36.8,47.5)*	57.8	*(52.5,63.2)*	100.0
Non-Medicaid	89.7	*(87.1,92.4)*	10.3	*(7.6,12.9)*	100.0
WIC status					
WIC	54.4	*(49.3,59.6)*	45.6	*(40.4,50.7)*	100.0
Non-WIC	88.8	*(86.1,91.4)*	11.2	*(8.6,13.9)*	100.0
Gravid status					
Primipara	64.9	*(60.2,69.6)*	35.1	*(30.4,39.8)*	100.0
Multipara	84.9	*(82.0,87.7)*	15.1	*(12.3,18.0)*	100.0

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or that Medicaid paid for prenatal care or the delivery.

Table 3. Medicaid, WIC, and Gravid Status by Employment or Student Status

	Currently employed or in school		Not currently employed or in school		TOTAL %
	%	95% CI	%	95% CI	
Medicaid status					
Medicaid*	54.0	*(48.5,59.5)*	46.0	*(40.5,51.5)*	100.0
Non-Medicaid	63.3	*(59.5,67.1)*	36.7	*(32.9,40.5)*	100.0
WIC status					
WIC	52.5	*(47.3,57.7)*	47.5	*(42.3,52.7)*	100.0
Non-WIC	64.9	*(60.9,68.8)*	35.2	*(31.2,39.1)*	100.1
Gravid status					
Primipara	69.5	*(64.9,74.0)*	30.5	*(26.0,35.1)*	100.0
Multipara	53.8	*(49.6,58.0)*	46.2	*(42.0,50.4)*	100.0

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or that Medicaid paid for prenatal care or the delivery.

REFERENCE TABLES 4-5.

- The vast majority of respondents said their source of household income during the past 12 months was a paycheck or money from a job (94.6 percent). TANF and other assistance programs (13.2 percent), money from family or friends (11.3 percent), child support or

alimony (10.1 percent), and money from a business (10.0 percent) were sources of household income for approximately equal proportions of respondents.

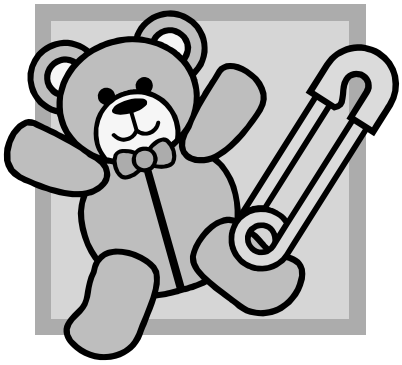
- One-third of respondents who were working or going to school said their baby was usually cared for by a babysitter, nanny, or other child care provider (37.1 percent). An additional one-third said their husband, partner, or other close relative usually cared for the baby (37.1 percent).

Table 4. Sources of Respondent's Household Income

Sources of household income	%	95% CI
Paycheck or money from a job	94.6	*(93.2,95.9)*
Aid such as Temporary Assistance for Needy Families (TANF), welfare, public assistance, general assistance, food stamps, or Supplemental Security Income	13.2	*(11.4,15.1)*
Money from family or friends	11.3	*(9.3,13.3)*
Child support or alimony	10.1	*(8.1,12.1)*
Money from a business, fees, dividends, or rental income	10.0	*(8.0,11.9)*
Unemployment benefits	6.4	*(4.9,7.9)*
Social security, worker's compensation, veteran benefits, or pensions	2.4	*(1.4,3.4)*
Other sources	5.5	*(4.1,7.0)*

Table 5. "Usual" Source of Child Care for Mothers Working Outside the Home or Going to School

"Usual" source of child care	%	95% CI
Babysitter, nanny, or other child care provider	37.1	*(32.9,41.3)*
Other close relative	19.4	*(16.0,22.9)*
Husband or partner	17.7	*(14.4,21.0)*
Staff at a daycare center	16.3	*(13.1,19.5)*
Friend or neighbor	3.3	*(1.7,4.8)*
Baby's teenage (13 years or older) brother or sister	0.4	*(0.0,0.9)*
Baby's preteen (12 years or younger) brother or sister	0.2	*(0.0,0.7)*
Other	5.6	*(3.7,7.5)*
TOTAL %	100.0	



Pregnancy Intendedness

What moms had to say:

"Very excited! We wanted to be pregnant for 8 years!"

"I felt too old."

"I wanted to have a baby to get some support so I could be on my own; if didn't have a baby, can't get Medicaid-tried to get help and past bills are too old."

“I have endometriosis, I was on the pill and I got pregnant. I am thrilled that our daughter is here and healthy. I have to say I had a hard pregnancy, shots 2 times a week because progesterone was low. My husband and I are very happy [baby’s name] is here. Thanks!”

“I think there should be more resources available to teens about choices, not just about abstinence. Obviously that's not working. I see a lot of teenaged mothers around. They're having sex and not being educated about their bodies, their choices, birth control and the consequences. They also need information on what happens when the baby is here. Money issues, freedom issues, body issues, etc.”

“We were very excited about our pregnancy due to the fact I was a 5 year breast cancer survivor. It was questionable if we would be able to due to chemotherapy, but I got pregnant 1 month after trying. We took every precaution & prenatal vitamin even before we got pregnant! (Also read many books, too).”

“I am a high school teacher and I see a lot of young girls who are pregnant and have no knowedge of how to care for babies. Keep up the good work with the education programs that the state is providing. Babies are such a wonderful responsiblity and need love, comfort, and proper care.”

“Most people think that "teen" pregnancy is a bad thing and is frowned on. I don't think that is true! Some of my friends (20 years and under) have had unplanned pregnancies and they are now great parents. But in my case, it was different. I was 17 yrs old when I found out that I had Endometriosis. I was told that my chances of having kids dropped every day. I was then put on the Depo Shot but I got very sick from it. So when I turned 18, my boy friend and I talked to our parents. We all agreed that we should try to have kids now! We tried for 6 months. I couldn't get pregnant. So I then had a laprascopy to remove my Endometriosis. I was pregnant 4 months after the surgery. I am so happy and I love my baby. I would do it all over again if I had to.”

"Bearing children and forming families are among the most meaningful and satisfying aspects of adult life, and it is in this context that encouraging intended pregnancy is so central … the lives of children and their families … would be strengthened considerably by an increase in the proportion of pregnancies that are purposefully undertaken and consciously desired."

The Best of Intentions – Institute of Medicine, 1995 (From 1999 New Mothers' Survey)

"Unplanned or unintended pregnancies reduce the opportunities for women to receive information about and make changes to diet and weight, use of folic acid, exercise, smoking, and use of alcohol and drugs before they get pregnant.

Identifying and reducing environmental risks (such as exposure to toxoplasmosis), evaluating vaccination and immunity status, and managing medical conditions such as diabetes also may be delayed."

1999 North Dakota New Mothers' Survey

Feelings About Being Pregnant

REFERENCE TABLES 1-2.

Respondents were asked to think back to how they felt about becoming pregnant *just before* they got pregnant. Respondents had the following response options to choose from: I wanted to be pregnant sooner, I wanted to be pregnant later, I wanted to be pregnant then, or I didn't want to be pregnant then or at any time in the future.

- Of all respondents, two-thirds said they wanted to be pregnant then or sooner (63.9 percent).
- Nearly 61 percent of Medicaid recipients indicated their pregnancies were not planned, meaning they wanted to be pregnant later (47.7 percent), or they did not want to be pregnant then or at anytime in the future (13.1 percent).
- Non-Medicaid recipients were nearly twice as likely as Medicaid recipients to have planned their pregnancies, that is they wanted to be pregnant then or sooner (73.8 percent and 39.2 percent, respectively).
- The proportion of unplanned pregnancies for WIC recipients was 56 percent, similar to Medicaid; 45 percent of WIC recipients said they wanted to be pregnant later, and 11 percent said they did not want to be pregnant then or at anytime in the future. Non-WIC recipients were more likely than WIC recipients to say they wanted to be pregnant then (53.6 percent and 32.2 percent, respectively).
- Multiparas (had previous live births) were more likely than primiparas (first-time mothers) to say they wanted to be pregnant sooner or then (68.4 percent and 58.2 percent, respectively). A larger proportion of primiparas than multiparas said they wanted to be pregnant later (36.5 percent and 24.4 percent, respectively).

Table 1. Feelings About Being Pregnant by Medicaid, WIC, and Primipara Status

Wanted to be pregnant…	All respondents		Medicaid*		WIC		Primiparas	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Sooner	18.1	*(15.6,20.5)*	11.1	*(7.4,14.9)*	11.7	*(8.4,15.1)*	19.1	*(15.3,23.0)*
Later	29.7	*(26.7,32.6)*	47.7	*(42.1,53.2)*	45.1	*(39.8,50.3)*	36.5	*(31.7,41.3)*
Then	45.8	*(42.6,49.0)*	28.1	*(23.3,33.0)*	32.2	*(27.4,37.0)*	39.1	*(34.2,43.9)*
Never**	6.5	*(4.9,8.0)*	13.1	*(9.0,17.1)*	11.0	*(7.7,14.3)*	5.3	*(2.8,7.8)*
TOTAL %	100.1		100.0		100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or that Medicaid paid for prenatal care or the delivery.
**Respondents who said they didn't want to be pregnant then or at any time in the future.

Table 2. Feelings About Being Pregnant by Non-Medicaid, Non-WIC, and Multipara Status

Wanted to be pregnant…	All respondents		Non-Medicaid		Non-WIC		Multiparas	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Sooner	18.1	*(15.6,20.5)*	20.7	*(17.6,23.9)*	21.8	*(18.4,25.2)*	17.3	*(14.0,20.5)*
Later	29.7	*(26.7,32.6)*	22.7	*(19.2,26.2)*	21.3	*(17.9,24.7)*	24.4	*(20.7,28.1)*
Then	45.8	*(42.6,49.0)*	53.1	*(49.1,57.0)*	53.6	*(49.4,57.7)*	51.1	*(46.8,55.3)*
Never*	6.5	*(4.9,8.0)*	3.5	*(2.1,5.0)*	3.4	*(1.8,4.9)*	7.3	*(5.2,9.3)*
TOTAL %	100.1		100.0		100.1		100.1	

*Respondents who said they didn't want to be pregnant then or at any time in the future.

Unintended Pregnancies

REFERENCE TABLE 3.

Respondents' feelings about being pregnant can be categorized as either unintended or intended pregnancies. An unintended pregnancy includes respondents who said they wanted to be pregnant later, as well as those who said they didn't want to be pregnant then or at any time in the future (never). An intended pregnancy includes respondents who said they wanted to be pregnant then or sooner.

- Younger mothers (respondents 15 to 19 years of age) were at least four times more likely to have unintended rather than intended pregnancies (81.9 percent and 18.1 percent, respectively). In contrast, respondents who were 25 or older were much more likely to have intended rather than unintended pregnancies.

- First-time mothers who were WIC recipients were twice as likely to have unintended pregnancies as intended pregnancies (66.8 percent and 33.2 percent, respectively).

- Among respondents who were non-WIC recipients, the majority of pregnancies were intended for both multiparas and primiparas (77.9 percent and 71.9 percent, respectively).

- Respondents who were white were nearly twice as likely to have intended rather than unintended pregnancies (65.5 percent and 34.5 percent, respectively). Respondents who were white were more likely to have intended pregnancies than Native American respondents (65.5 percent and 47.8 percent, respectively). However, caution should be used when interpreting these data due to small numbers. Data about mothers of other races are not reportable because of too few respondents.

- Respondents who had not graduated from high school (having between 9 and 11 years of education) were twice as likely to have unintended rather than intended pregnancies (66.5 percent and 33.5 percent, respectively). In contrast, those who had at least some college (13 or more years of education) were significantly more likely to have intended pregnancies.

- Urban or rural residence was not a factor in whether the respondent's pregnancy was intended.

- Respondents who did not have insurance were more likely to have unintended than intended pregnancies (59.2 percent and 40.8 percent, respectively). In contrast, respondents who did have insurance were significantly more likely to have intended rather than unintended pregnancies (71.5 percent and 28.5 percent, respectively).

Table 3. Selected Characteristics by Intendedness of Pregnancy

Characteristics	Intended		Unintended		TOTAL %
	%	95% CI	%	95% CI	
Mother's age					
15 to 19 years	18.1	*(8.1,28.1)*	81.9	*(71.9,91.9)*	100.0
20 to 24 years	50.1	*(44.1,56.1)*	49.9	*(43.9,55.9)*	100.0
25 to 29 years	72.0	*(66.9,77.2)*	28.0	*(22.8,33.1)*	100.0
30 to 34 years	78.0	*(72.6,83.5)*	22.0	*(16.5,27.4)*	100.0
35 years and older	77.0	*(68.4,85.6)*	23.0	*(14.5,31.6)*	100.0
WIC participation and Gravid status					
WIC primiparas	33.2	*(25.5,41.0)*	66.8	*(59.0,74.5)*	100.0
WIC multiparas	52.0	*(44.9,59.1)*	48.0	*(40.9,55.1)*	100.0
Non-WIC participation and Gravid status					
Non-WIC primiparas	71.9	*(65.9,77.9)*	28.1	*(22.1,34.1)*	100.0
Non-WIC multiparas	77.9	*(73.2,82.6)*	22.1	*(17.4,26.8)*	100.0
Mother's race					
White	65.5	*(62.3,68.7)*	34.5	*(31.3,37.7)*	100.0
Native American	47.8	*(36.2,59.3)*	52.2	*(40.7,63.8)*	100.0
Other	NR	*NR*	NR	*NR*	NR
Mother's education					
8 years or less	NR	*NR*	NR	*NR*	NR
9 to 11 years	33.5	*(21.5,45.5)*	66.5	*(54.5,78.5)*	100.0
12 years	51.2	*(44.7,57.6)*	48.9	*(42.4,55.3)*	100.1
13 to 15 years	64.8	*(59.3,70.4)*	35.2	*(29.6,40.8)*	100.0
16 or more years	78.1	*(73.8,82.4)*	21.9	*(17.6,26.2)*	100.0
Urban/rural residence					
Urban	65.9	*(61.4,70.4)*	34.1	*(29.6,38.6)*	100.0
Rural	62.1	*(57.9,66.4)*	37.9	*(33.6,42.2)*	100.0
Insurance status					
No, did not have insurance	40.8	*(35.1,46.5)*	59.2	*(53.5,65.0)*	100.0
Yes, had insurance	71.5	*(67.9,75.1)*	28.5	*(24.9,32.1)*	100.0

NOTE: NR means not reportable due to too few responses.

"Appropriate prenatal care can be important to both mother and child because it can promote healthier pregnancies by managing preexisting and pregnancy-related medical conditions, providing health behavior advice, and assessing the risk of poor pregnancy outcomes.

Measuring the incidence of tobacco use during pregnancy is important because it is one of the key preventable causes of a number of adverse pregnancy outcomes, including low birthweight, intrauterine growth retardation, miscarriage, and infant mortality, as well as negative consequences for child health and development.

Alcohol use during pregnancy can severely jeopardize birth outcomes, independent of other risk factors including tobacco use and other maternal risk factors."

National Vital Statistics Reports, Births: Final Data for 2002. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, and National Vital Statistics System.

REFERENCE TABLE 4.

- Two-thirds of respondents whose pregnancies were unintended said they did not take a multivitamin at all in the month before becoming pregnant (65.7 percent).
- While the majority of respondents whose pregnancies were intended said they took a multivitamin at least one to three times per week (64.9 percent), more than one-third said they did not take a multivitamin at all (35.1 percent).
- A large majority of respondents who had intended pregnancies started prenatal care in the first trimester (85.0 percent).
- Nearly one-third of respondents who had unintended pregnancies started their prenatal care late, meaning after the first trimester (29.9 percent).
- One in 10 respondents who had intended pregnancies smoked in the last three months of pregnancy, while one in four respondents who had unintended pregnancies smoked (10.6 percent and 24.8 percent, respectively).
- An overwhelming majority of respondents who had intended and unintended pregnancies said they did not use alcohol during the last three months of pregnancy (97.6 percent and 94.2 percent, respectively). Although one might conclude that respondents who had unintended pregnancies were more likely to use alcohol during the last three months than respondents who had intended pregnancies, the data cannot confirm this relationship due to small numbers.

Table 4. Intendedness of Pregnancy by At-Risk Behaviors

At-risk behaviors	Intended		Unintended	
	%	95% CI	%	95% CI
Multivitamin use				
Didn't take a multivitamin at all	35.1	*(31.3,39.0)*	65.7	*(60.6,70.9)*
1 to 3 times per week	11.7	*(9.1,14.2)*	12.7	*(9.1,16.2)*
4 to 6 times per week	12.0	*(9.4,14.6)*	5.6	*(2.8,8.4)*
Every day of the week	41.2	*(37.3,45.2)*	16.0	*(12.0,19.9)*
TOTAL %	100.0		100.0	
Prenatal care				
Prenatal care in first trimester	85.0	*(82.1,87.9)*	68.3	*(63.2,73.4)*
No prenatal care in first trimester	14.6	*(11.7,17.5)*	29.9	*(24.9,34.9)*
Did not go for prenatal care	0.4	*(0.0,0.9)*	1.8	*(0.2,3.4)*

At-risk behaviors	Intended		Unintended	
	%	95% CI	%	95% CI
TOTAL %	100.0		100.0	
Tobacco use in last 3 months of pregnancy				
Did NOT use tobacco during last 3 months of pregnancy	89.4	*(87.0,91.8)*	75.2	*(70.5,79.8)*
Did use tobacco during last 3 months of pregnancy	10.6	*(8.2,13.0)*	24.8	*(20.2,29.5)*
TOTAL %	100.0		100.0	
Alcohol use in last 3 months of pregnancy				
Did NOT use alcohol during last 3 months of pregnancy	97.6	*(96.3,98.8)*	94.2	*(91.5,96.9)*
Did use alcohol during last 3 months of pregnancy	2.5	*(1.2,3.7)*	5.8	*(3.1,8.5)*
TOTAL %	100.1		100.0	

Family Planning Practices

REFERENCE TABLE 5.

Respondents were asked if they were trying to become pregnant at the time they became pregnant with their new baby. Overall, 55 percent said "yes" (data not shown). Mothers who were not trying to become pregnant were asked if they had been doing anything to keep from getting pregnant. More than half of respondents not trying to become pregnant said they were not using any birth control methods when they became pregnant (55.4 percent) (data not shown).

- Medicaid recipients not trying to become pregnant were more likely not to be using birth control than to be using birth control (57.2 percent and 42.8 percent, respectively).

- Among WIC recipients not trying to become pregnant, proportions were similar between those not using birth control and those using birth control (51.7 percent and 48.3 percent, respectively).

Table 5. Medicaid Recipient Status and WIC Recipient Status by Whether Those Not Trying to Become Pregnant Were Using Birth Control

Medicaid and WIC	Not using birth control		Using birth control		TOTAL %
	%	95% CI	%	95% CI	
Medicaid status					
Medicaid*	57.2	*(50.7,63.8)*	42.8	*(36.2,49.3)*	100.0
Non-Medicaid	54.5	*(47.4,61.5)*	45.6	*(38.5,52.6)*	100.1
WIC status					
WIC	51.7	*(45.2,58.2)*	48.3	*(41.8,54.9)*	100.0
Non-WIC	60.4	*(53.1,67.7)*	39.6	*(32.3,47.0)*	100.0

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or that Medicaid paid for prenatal care or the delivery.

REFERENCE TABLE 6.

- One third of respondents not trying to become pregnant and not using birth control were between 20 and 24 years of age.

- Among respondents not trying to become pregnant, gravid status was not a factor in whether or not respondent used birth control.

Table 6. Whether Those Not Trying to Become Pregnant Were Using Birth Control by Age and Gravid Status

Age and gravid status	Not using birth control		Using birth control	
	%	95% CI	%	95% CI
Mother's age				
15 to 19 years	17.3	*(11.8,22.7)*	15.3	*(9.2,21.5)*
20 to 24 years	34.4	*(28.4,40.3)*	33.5	*(26.8,40.2)*
25 to 29 years	21.6	*(16.1,27.0)*	29.0	*(22.3,35.7)*
30 to 34 years	18.0	*(13.2,22.8)*	13.0	*(8.0,17.9)*
35 years and older	8.8	*(5.1,12.5)*	9.2	*(5.0,13.3)*
TOTAL %	100.1		100.0	
Gravid status				
Primipara	49.2	*(42.6,55.7)*	43.9	*(36.4,51.3)*
Multipara	50.8	*(44.3,57.4)*	56.1	*(48.7,63.6)*
TOTAL %	100.0		100.0	

REFERENCE TABLE 7.

- The top three reasons respondents who had not been trying to become pregnant gave for not using birth control were that they did not mind getting pregnant (43.2 percent), they thought they could not get pregnant at the time (19.4 percent), and their partner did not want to use anything (17.0 percent). Although a small proportion, it is important to recognize that 4 percent of respondents who were not trying to become pregnant had problems getting birth control when they needed it.

- Respondents who said they were not using birth control because their partner did not want to use anything tended to be younger; 39 percent were between 15 and 19 years of age and an additional 35 percent were between 20 and 24 years of age (data not shown). Caution should be used when interpreting these data due to small numbers.

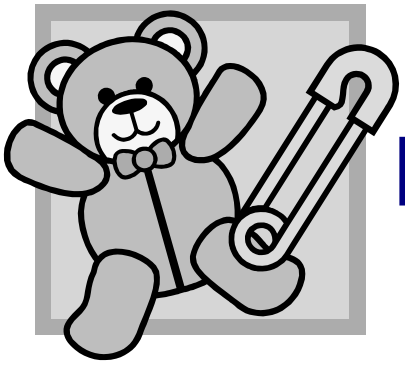
Table 7. Reasons For Not Using Birth Control Among Those Not Trying to Become Pregnant

Reasons	%	95% CI
Did not mind getting pregnant	43.2	*(37.0,49.4)*
Thought they could not get pregnant at the time	19.4	*(14.5,24.2)*
Partner did not want to use anything	17.0	*(12.2,21.9)*
Had side effects from method of birth control	10.8	*(7.2,14.3)*
Thought self or partner was sterile	6.8	*(3.7,9.8)*
Had problems getting birth control when needed it	4.1	*(1.5,6.6)*
Other reasons	18.4	*(13.6,23.2)*

Other Issues

- Three-fourths of respondents indicated they had health insurance just before they became pregnant. Seven percent said they were on Medicaid prior to their pregnancy (data not shown).

- More than half of respondents said they had other babies who were born alive (57.4 percent). Eight percent said they delivered a low birthweight baby (less than 5 pounds, 8 ounces) prior to this pregnancy, while 10 percent said their previous delivery resulted in a pre-term birth (born more than 3 weeks before due date) (data not shown).



Maternal Health Services Utilization

What moms had to say:

“I couldn't get an appointment earlier in my pregnancy.”

“I think that there should be some sort of affordable insurance for self-employed farmers. We make too much money to qualify for most programs and yet we cannot afford insurance for ourselves and our children. I live in fear of some accident and not being able to pay for my children’s care. Please note I am an older mother. I have had 3 c-sections.”

“I was a high risk pregnancy due to my heart. I was not supposed to have anymore kids because of the risk factors. Because of that reason it was hard to find prenatal care. Everyone was afraid to care for me and deliver the baby.”

“I have the factor V Leiden gene. I had to take Heparin all through my pregnancy & 6 weeks after my daughter was born. Having the factor V gene I am more likely to have blood clots & miscarriages. I learned I had this gene after my parents found out they had it. Then I was tested. I had never heard of this before my parents told me about this. Since it can cause miscarriages, why haven't I heard of this before or read about it in books? When I hear of women who have had many miscarriages I wonder if they also have factor V. This blood disorder is never talked about. Why? I think it is important. I am glad that I could help you with your survey. I hope you get the answers you need or the answers you are looking for in this study.”

“Very little information is taught @ the Dr's office. They check you & you're on your way. Being educated, I find needed info. But what about those who do not have guidance, ambition, or know-how to search for their info? Breastfeeding is also not as supported as I would like to see. Hosp/clinic staff needs more education. More nurses should be lactation consultants. Too much wrong & varying info. is given out. We need more consistent training.”

“The Bambi program with ND Dept of health is wonderful. I would suggest more info re: RSV available to the public/new moms especially during the RSV "season." I suggest more info re: screenings for "older" moms (more than 35 yrs old).“

“I feel fortunate to have good health benefits coverage so as to never not go to the doctor due to $. I wish all pregnant women in ND could enjoy the same sense of security I have. I am a full time employed healthcare provider (Occupational Therapist) and feel I am an informed patient and compliant with all recommendations.”

“Medicaid has been a wonderful resource that has allowed us to feel confident during all three of our pregnancies - we are grateful for the program & all of the high-quality staff running it. Also, I recently met 3 mothers who had the unfortunate losses of babies, both during pregnancy & soon after birth. I think there is a need for more support & guidance for such mothers so they may have greater healing after such tragedies. Wounded mothers are such an unrecognized problem with badly needed solutions. Also, money & time should be invested in qualified MENTORING for women who haven't had good accessible role models of healthy, happy women. I'd be interested in participating in such programs :)”

“I was lucky and had an excellent doctor, for both of my pregnancies. However many of my friends and family have had to see other doctors because it take several months to get into a good doctor. Certain doctors don't run all the prenatal test for birth defects, but my doctor ran every test possible leaving me reassured and not worrying. I feel testing for all birth defects is necessary so a mother is at ease with what to expect.”

Prenatal Issues

REFERENCE TABLES 1-3.

- Eight out of 10 respondents indicated they received prenatal care as early as they had wanted (81.5 percent) (data not shown). For mothers who did not get prenatal care as early as they wanted, one-third said the reason they did not get early prenatal care was because they did not know they were pregnant (37.5 percent). One-fourth said they could not get an appointment earlier in their pregnancy (26.7 percent), and one-fifth said their doctor or health plan would not start prenatal care earlier (21.9 percent). One in 10 said they did not have enough money or insurance to pay for their prenatal care visits (12.4 percent).

- When asked where they went most of the time for their prenatal care, two of three respondents said they went to a hospital clinic (68.4 percent) (data not shown). One in five went to a private doctor's office or HMO clinic (22.0 percent) (data not shown).

- The number of prenatal care visits for respondents ranged from 0 to 30, with an average of 11 visits (data not shown).

- Two-thirds of respondents said they had between six and 12 prenatal care visits (69.7 percent), and one-fourth said they had 13 or more visits (26.4 percent). Four percent said they had, at most, five prenatal care visits.

- Two-thirds of respondents ages 20 to 24 said they had between six and 12 prenatal care visits (65.9 percent), whereas three-fourths of respondents ages 30 to 34 said they had between 6 and 12 prenatal care visits (78.0 percent). Caution should be used when interpreting data regarding respondents 35 years of age and older due to small numbers.

Table 1. Reasons Why Prenatal Care Was Not Received as Early as Wanted

Reasons	%	95% CI
Did not know they were pregnant	37.5	*(30.2,44.7)*
Could not get an appointment earlier in pregnancy	26.7	*(19.8,33.7)*
Doctor or health plan would not start earlier	21.9	*(15.3,28.4)*
Did not have enough money or insurance to pay for visits	12.4	*(7.4,17.3)*
Too many other things going on	7.7	*(4.0,11.4)*
No one to care for children	5.2	*(1.9,8.5)*
No way to get to the clinic or doctor's office	4.8	*(1.8,7.8)*
Did not have Medicaid card	2.2	*(0.4,4.1)*
Other reasons	15.1	*(9.6,20.6)*

Table 2. Number of Prenatal Care Visits

Number of prenatal care visits	%	95% CI
1 to 5 visits	3.9	*(2.7,5.2)*
6 to 12 visits	69.7	*(66.7,72.6)*
13 or more visits	26.4	*(23.5,29.2)*
Received no prenatal care	0.1	*(0.0,0.2)*
TOTAL %	100.1	

Table 3. Mother's Age by Number of Prenatal Care Visits

Mothers age*	1 to 5 visits		6 to 12 visits		13 or more visits		No PNC visits		TOTAL %
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
15 to 19 years	15.0	*(5.6,24.3)*	55.2	*(42.1,68.3)*	29.9	*(17.3,42.4)*	0.0	*(0.0,0.0)*	100.1
20 to 24 years	3.4	*(1.3,5.6)*	65.9	*(60.1,71.6)*	30.5	*(24.9,36.1)*	0.3	*(0.0,0.7)*	100.1
25 to 29 years	2.6	*(0.9,4.3)*	70.4	*(65.2,75.6)*	27.1	*(22.0,32.2)*	0.0	*(0.0,0.0)*	100.1
30 to 34 years	2.0	*(0.3,3.6)*	78.0	*(72.6,83.5)*	20.0	*(14.7,25.3)*	0.0	*(0.0,0.0)*	100.0
35 and older	5.4	*(0.9,9.9)*	68.8	*(59.4,78.3)*	25.8	*(16.9,34.7)*	0.0	*(0.0,0.0)*	100.0

*Caution should be used when interpreting data regarding respondents 35 years of age and older due to small numbers.

REFERENCE TABLES 4-5.

- Of all respondents, 20 percent said they did not receive prenatal care in the first trimester (data not shown).
- Medicaid recipients were less likely than non-Medicaid recipients to get prenatal care in the first trimester (69.0 percent and 84.0 percent, respectively). One-third of Medicaid recipients did not receive prenatal care in the first trimester (31.0 percent).
- WIC recipients were less likely than non-WIC recipients to get prenatal care in the first trimester (73.3 percent and 82.5 percent, respectively). One-fourth of WIC recipients did not receive prenatal care in the first trimester.
- Gravid status was not a factor in whether the respondent received prenatal care in the first trimester.
- Respondents were more likely to get prenatal care in the first trimester if:
    - They were older (25 to 34 years of age).
    - They had at least some college education.
    - They were married.
    - They were white.
- Urban/rural residence was not a factor in whether the respondent received prenatal care in the first trimester.
- Caution should be used when interpreting data regarding respondents who are 15 to 19 years of age, 35 years of age and older, have between 9 and 11 years of education, or are Native American due to small numbers. Unfortunately, data for respondents who have less than 9 years of education, and are of a race other than white or Native American are not reportable because of too few responses.

Table 4. Medicaid, WIC, and Gravid Status by Whether Mother Received Prenatal Care in the First Trimester

Status	Prenatal care first trimester		No prenatal care first trimester		Did not go for prenatal care		TOTAL %
	%	95% CI	%	95% CI	%	95% CI	
Medicaid status							
Medicaid*	69.0	*(63.8,74.3)*	31.0	*(25.7,36.2)*	0.0	*(0.0,0.0)*	100.0
Non-Medicaid	84.0	*(81.0,86.9)*	16.0	*(13.1,19.0)*	0.0	*(0.0,0.0)*	100.0
WIC status							
WIC	73.3	*(68.7,77.9)*	25.1	*(20.6,29.6)*	1.6	*(0.1,3.2)*	100.0
Non-WIC	82.5	*(79.3,85.7)*	17.2	*(14.1,20.4)*	0.3	*(0.0,0.7)*	100.0

Status	Prenatal care first trimester		No prenatal care first trimester		Did not go for prenatal care		TOTAL %
	%	95% CI	%	95% CI	%	95% CI	
Gravid status							
Primipara	77.8	*(73.5,82.1)*	20.6	*(16.4,24.7)*	1.7	*(0.2,3.1)*	100.1
Multipara	79.8	*(76.5,83.1)*	19.8	*(16.5,23.2)*	0.4	*(0.0,0.7)*	100.0

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 5. Whether Mother Received Prenatal Care in the First Trimester by Characteristics

Characteristics	Prenatal care first trimester		No prenatal care first trimester		Did not go for prenatal care		TOTAL %
	%	95% CI	%	95% CI	%	95% CI	
Mother's age*							
15 to 19 years	45.2	*(32.2,58.2)*	48.4	*(35.4,61.4)*	6.4	*(0.0,13.2)*	100.0
20 to 24 years	76.4	*(71.2,81.5)*	22.9	*(17.7,28.0)*	0.8	*(0.0,1.6)*	100.1
25 to 29 years	83.8	*(79.7,87.9)*	16.2	*(12.1,20.4)*	0.0	*(0.0,0.0)*	100.0
30 to 34 years	86.8	*(82.4,91.2)*	13.2	*(8.8,17.6)*	0.0	*(0.0,0.0)*	100.0
35 and older	77.7	*(69.2,86.2)*	20.4	*(12.1,28.7)*	1.9	*(0.0,4.5)*	100.0
Mother's education*							
8 years or less	NR	*NR*	NR	*NR*	NR	*NR*	NR
9 to 11 years	58.8	*(46.1,71.6)*	36.6	*(24.2,49.1)*	4.6	*(0.0,9.4)*	100.0
12 years	70.3	*(64.4,76.3)*	28.2	*(22.4,34.1)*	1.5	*(0.0,3.3)*	100.0
13 to 15 years	82.2	*(77.8,86.6)*	17.6	*(13.2,22.0)*	0.2	*(0.0,0.6)*	100.0
16 or more years	85.9	*(82.2,89.6)*	13.8	*(10.1,17.5)*	0.3	*(0.0,0.9)*	100.0
Mother's marital status							
Married	83.4	*(80.7,86.1)*	16.4	*(13.6,19.1)*	0.3	*(0.0,0.6)*	100.1
Not married	64.6	*(58.1,71.0)*	32.4	*(26.1,38.7)*	3.0	*(0.5,5.5)*	100.0
Mother's race*							
White	80.6	*(77.9,83.3)*	18.9	*(16.3,21.6)*	0.4	*(0.0,1.0)*	99.9
Native American	60.8	*(49.5,72.2)*	35.0	*(23.8,46.1)*	4.2	*(0.3,8.2)*	100.0
Other	NR	*NR*	NR	*NR*	NR	*NR*	NR
Urban/rural residence							
Urban	81.4	*(77.6,85.2)*	17.7	*(14.0,21.3)*	0.9	*(0.0,2.1)*	100.0
Rural	76.8	*(73.1,80.5)*	22.4	*(18.7,26.1)*	0.9	*(0.1,1.6)*	100.1

*Caution should be used when interpreting data regarding respondents who are 15 to 19 years of age, 35 years of age and older, have between 9 and 11 years of education, or are Native American due to small numbers.
NOTE: NR means not reportable due to too few responses.

REFERENCE TABLES 6-8.

- Of Medicaid recipients:
  - A large majority said Medicaid paid for their prenatal care (85.2 percent).
  - One in five said they used personal income to pay for their prenatal care (18.3 percent).
  - One in five indicated insurance or an HMO paid for their prenatal care.
  - Seven percent said Indian Health Service paid for their prenatal care.
  - One percent said their prenatal care was paid for by the military.

- Of WIC recipients:
  - One in two said Medicaid was the source of payment for their prenatal care (52.8 percent).
  - One in four said they used personal income to pay for their prenatal care (23.7 percent).
  - One in three said their prenatal care was paid for by insurance or an HMO (35.5 percent).

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- Nine percent indicated the Indian Health Service paid for their prenatal care.
- Nine percent said their prenatal care was paid for by the military.

- Of primiparas:
  - One in four said Medicaid paid for their prenatal care (24.1 percent).
  - One in four indicated their prenatal care was paid for by personal income (27.1 percent).
  - Two in three said their insurance or an HMO paid for their prenatal care.
  - Four percent said their prenatal care was paid for by the Indian Health Service.
  - Eight percent said the military paid for their prenatal care.

- Of multiparas:
  - One in five indicated that Medicaid paid for their prenatal care (22.6 percent).
  - One in four said they paid for their prenatal care with personal income (29.8 percent).
  - Two in three indicated that insurance or an HMO paid for their prenatal care (67.7 percent).
  - Five percent said their prenatal care was paid for by the Indian Health Service.
  - Six percent indicated the Military paid for their prenatal care.

Table 6. Medicaid Status by Sources of Payment for Prenatal Care

Sources of payment for prenatal care	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Medicaid				
No	14.8	*(10.3,19.2)*	100.0	*(100.0,100.0)*
Yes	85.2	*(80.8,89.7)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.0	
Personal income				
No	81.7	*(77.1,86.2)*	67.6	*(63.9,71.3)*
Yes	18.3	*(13.8,22.9)*	32.4	*(28.8,36.1)*
TOTAL %	100.0		100.0	
Insurance or HMO				
No	80.3	*(75.6,85.0)*	15.1	*(12.2,18.1)*
Yes	19.7	*(15.0,24.4)*	84.9	*(81.9,87.8)*
TOTAL %	100.0		100.0	
Indian Health Service				
No	93.2	*(90.4,96.0)*	97.0	*(95.6,98.4)*
Yes	6.8	*(4.0,9.6)*	3.0	*(1.6,4.4)*
TOTAL %	100.0		100.0	
Military				
No	99.1	*(98.0,100.0)*	90.7	*(88.3,93.1)*
Yes	0.9	*(0.0,2.0)*	9.3	*(6.9,11.8)*
TOTAL %	100.0		100.0	
Other source				
No	97.4	*(95.4,99.4)*	99.1	*(98.3,100.0)*
Yes	2.6	*(0.6,4.6)*	0.9	*(0.0,1.7)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 7. WIC Status by Sources of Payment for Prenatal Care

Sources of payment for prenatal care	WIC		Non-WIC	
	%	95% CI	%	95% CI
Medicaid				
No	47.2	*(42.5,51.9)*	93.4	*(91.6,95.1)*
Yes	52.8	*(48.1,57.6)*	6.6	*(4.9,8.4)*

Sources of payment for prenatal care	WIC		Non-WIC	
	%	95% CI	%	95% CI
TOTAL %	100.0		100.0	
Personal income				
No	76.3	*(71.7,80.9)*	68.5	*(64.7,72.3)*
Yes	23.7	*(19.1,28.3)*	31.5	*(27.7,35.3)*
TOTAL %	100.0		100.0	
Insurance or HMO				
No	64.5	*(59.6,69.4)*	15.4	*(12.4,18.3)*
Yes	35.5	*(30.6,40.4)*	84.6	*(81.7,87.6)*
TOTAL %	100.0		100.0	
Indian Health Service				
No	91.1	*(88.1,94.1)*	98.7	*(97.7,99.7)*
Yes	8.9	*(5.9,11.9)*	1.3	*(0.3,2.3)*
TOTAL %	100.0		100.0	
Military				
No	91.4	*(88.1,94.7)*	93.8	*(91.7,95.9)*
Yes	8.6	*(5.3,11.9)*	6.2	*(4.1,8.3)*
TOTAL %	100.0		100.0	
Other source				
No	97.0	*(94.9,99.0)*	99.6	*(99.1,100.0)*
Yes	3.1	*(1.0,5.1)*	0.4	*(0.0,0.9)*
TOTAL %	100.1		100.0	

Table 8 . Gravid Status by Sources of Payment for Prenatal Care

Sources of payment for prenatal care	Primiparas		Multiparas	
	%	95% CI	%	95% CI
Medicaid				
No	76.0	*(72.5,79.4)*	77.4	*(74.8,80.1)*
Yes	24.1	*(20.6,27.5)*	22.6	*(19.9,25.2)*
TOTAL %	100.1		100.0	
Personal income				
No	72.9	*(68.5,77.3)*	70.2	*(66.3,74.1)*
Yes	27.1	*(22.7,31.5)*	29.8	*(25.9,33.7)*
TOTAL %	100.0		100.0	
Insurance or HMO				
No	33.6	*(29.3,38.0)*	32.4	*(28.8,35.9)*
Yes	66.4	*(62.0,70.7)*	67.7	*(64.1,71.2)*
TOTAL %	100.0		100.1	
Indian Health Service				
No	96.5	*(94.7,98.3)*	95.4	*(93.5,97.2)*
Yes	3.5	*(1.8,5.3)*	4.7	*(2.8,6.5)*
TOTAL %	100.0		100.1	
Military				
No	92.0	*(88.9,95.1)*	93.6	*(91.5,95.8)*
Yes	8.1	*(5.0,11.2)*	6.4	*(4.2,8.5)*
TOTAL %	100.1		100.0	
Other source				
No	98.6	*(97.6,99.6)*	98.7	*(97.5,99.9)*
Yes	1.4	*(0.4,2.4)*	1.3	*(0.1,2.5)*
TOTAL %	100.0		100.0	

Genetic Disorders/HIV/AIDS Testing

"A birth defect is any abnormality present at birth. Some birth defects are inherited, and some may be caused by infections or by exposure to certain substances. A genetic disorder is a disease or defect that is inherited. Genetic disorders are not always noticeable at birth, but appear later in life.

Every pregnant woman should be offered an HIV test as part of her normal prenatal care. North Dakota law requires physicians to obtain informed consent prior to testing for HIV/AIDS."

1999 North Dakota New Mothers' Survey

REFERENCE TABLE 9.

- Eight out of 10 respondents indicated a health care worker talked with them about tests to screen for birth defects (80.9 percent).

- Three out of four respondents said a health care worker talked with them about testing for HIV (73.1 percent).

Table 9. Whether Health Care Worker Had Discussions with Mother Regarding Genetic Disorders and HIV Testing

Health care worker discussions during prenatal care visits	%	95% CI
Whether health care worker talked with mother about doing tests to screen for birth defects or diseases that run in the family		
No	19.1	*(16.6,21.6)*
Yes	80.9	*(78.4,83.4)*
TOTAL %	100.0	
Whether health care worker talked with mother about getting tested for HIV		
No	26.9	*(24.0,29.7)*
Yes	73.1	*(70.3,76.0)*
TOTAL %	100.0	

Resource Information

Genetic and birth defects counseling is a medical service helping families understand a family member's disorder. Clinics are offered throughout the state. To receive genetic and birth defects services ask your doctor for a referral, or call 701-777-4277 directly. You may also access information online at http://www.med.und.nodak.edu/depts/peds/gf/genetics.htm.

The Centers for Medicare and Medicaid Services (CMS), formerly the Health Care Financing Administration, has developed the Maternal HIV Consumer Information Project (CIP) to increase patient and provider knowledge about the availability of drugs that reduce HIV transmission, and to expand knowledge of Medicaid eligibility and coverage of prenatal care. Health care providers are encouraged to contact the North Dakota Department of Health HIV/AIDS Program at 800-706-3448 or 701-328-2378 to obtain free CIP patient education materials for distribution to all women of childbearing age. You may also access information online at http://ndhiv.com.

Discussions With Health Care Workers

REFERENCE TABLES 10-12.

- Medicaid recipients were more likely than non-Medicaid recipients to have had discussions with a health care worker regarding:
    - Smoking during pregnancy and how it could affect the baby (78.7 percent and 63.5 percent, respectively).
    - Breastfeeding (87.9 percent and 81.3 percent, respectively).
    - Drinking alcohol during pregnancy and how it could affect the baby (77.3 percent and 65.4 percent, respectively).
    - Postpartum birth control methods to use (79.0 percent and 71.0 percent, respectively).
    - Use of illegal drugs during pregnancy and how they could affect the baby (67.3 percent and 51.3 percent, respectively).
    - Physical abuse to women by their husbands or partners (36.9 percent and 19.5 percent, respectively). The majority of both Medicaid and non-Medicaid recipients said they did not have discussions with health care workers about physical abuse to women by their husbands or partners (63.1 percent and 80.5 percent, respectively).

- There was very little difference between Medicaid and non-Medicaid recipients with respect to discussions with health care workers about using seat belts during pregnancy.

- WIC recipients were more likely than non-WIC recipients to have had discussions with a health care worker regarding:
    - Smoking during pregnancy and how it could affect the baby (78.2 percent and 61.6 percent, respectively).
    - Breastfeeding (89.2 percent and 79.6 percent, respectively).
    - Drinking alcohol during pregnancy and how it could affect the baby (77.0 percent and 63.8 percent, respectively).
    - Postpartum birth control methods to use (77.6 percent and 70.6 percent, respectively).
    - Use of illegal drugs during pregnancy and how they could affect the baby (67.0 percent and 49.2 percent, respectively).
    - Testing for HIV (77.8 percent and 70.3 percent, respectively).
    - Physical abuse to women by their husbands or partners (35.0 percent and 18.3 percent, respectively). The majority of WIC and non-WIC recipients said they did not have discussions with health care workers about physical abuse to women by their husbands or partners (65.1 percent and 81.7 percent, respectively).

- Primiparas were more likely than multiparas to have had discussions with health care workers regarding:
    - Smoking during pregnancy and how it could affect the baby (73.1 percent and 63.6 percent, respectively).
    - Breastfeeding (87.4 percent and 79.7 percent, respectively).
    - Drinking alcohol during pregnancy (75.5 percent and 63.8 percent, respectively).
    - Use of illegal drugs during pregnancy and how they could affect the baby (62.4 percent and 50.6 percent, respectively).

Table 10. Medicaid Status by Health Care Worker Discussions Regarding Various Topics

Topics of discussion	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
How smoking during pregnancy could affect the baby				
No	21.3	*(16.7,25.9)*	36.5	*(32.7,40.3)*
Yes	78.7	*(74.1,83.3)*	63.5	*(59.8,67.3)*
TOTAL %	100.0		100.0	
Breastfeeding the baby				
No	12.1	*(8.5,15.8)*	18.7	*(15.6,21.8)*
Yes	87.9	*(84.2,91.6)*	81.3	*(78.3,84.4)*
TOTAL %	100.0		100.0	
How drinking alcohol during pregnancy could affect the baby				
No	22.7	*(18.0,27.4)*	34.7	*(30.9,38.4)*
Yes	77.3	*(72.6,82.0)*	65.4	*(61.6,69.1)*
TOTAL %	100.0		100.1	
Using a seatbelt during pregnancy				
No	54.5	*(49.0,59.9)*	53.7	*(49.8,57.7)*
Yes	45.6	*(40.1,51.0)*	46.3	*(42.3,50.2)*
TOTAL %	100.1		100.0	
Birth control methods to use after pregnancy				
No	21.0	*(16.6,25.4)*	29.0	*(25.4,32.6)*
Yes	79.0	*(74.6,83.4)*	71.0	*(67.5,74.6)*
TOTAL %	100.0		100.0	
Medicines that are safe to take during pregnancy				
No	13.4	*(9.7,17.2)*	9.7	*(7.4,12.0)*
Yes	86.6	*(82.8,90.4)*	90.3	*(88.0,92.6)*
TOTAL %	100.0		100.0	
How using illegal drugs could affect the baby				
No	32.7	*(27.4,38.0)*	48.7	*(44.8,52.7)*
Yes	67.3	*(62.0,72.6)*	51.3	*(47.3,55.3)*
TOTAL %	100.0		100.0	
Doing tests to screen for birth defects or diseases that run in the family				
No	20.6	*(16.4,24.9)*	18.3	*(15.2,21.3)*
Yes	79.4	*(75.1,83.6)*	81.7	*(78.7,84.8)*
TOTAL %	100.0		100.0	
What to do if labor starts early				
No	20.0	*(15.5,24.5)*	24.6	*(21.1,28.0)*
Yes	80.0	*(75.5,84.5)*	75.5	*(72.0,78.9)*
TOTAL %	100.0		100.1	
Getting blood tested for HIV				
No	23.7	*(19.1,28.3)*	28.1	*(24.6,31.7)*
Yes	76.3	*(71.7,80.9)*	71.9	*(68.3,75.4)*
TOTAL %	100.0		100.0	
Physical abuse to women by their husbands or partners				
No	63.1	*(57.9,68.3)*	80.5	*(77.3,83.7)*
Yes	36.9	*(31.7,42.2)*	19.5	*(16.4,22.7)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 11. WIC Status by Health Care Worker Discussions Regarding Various Topics

Topics of discussion	WIC		Non-WIC	
	%	95% CI	%	95% CI
How smoking during pregnancy could affect the baby				
No	21.8	*(17.5,26.2)*	38.4	*(34.4,42.4)*
Yes	78.2	*(73.8,82.5)*	61.6	*(57.6,65.6)*
TOTAL %	100.0		100.0	
Breastfeeding the baby				
No	10.8	*(7.5,14.1)*	20.4	*(17.1,23.7)*
Yes	89.2	*(85.9,92.5)*	79.6	*(76.3,82.9)*
TOTAL %	100.0		100.0	
How drinking alcohol during pregnancy could affect the baby				
No	23.0	*(18.5,27.4)*	36.2	*(32.3,40.2)*
Yes	77.0	*(72.6,81.5)*	63.8	*(59.8,67.8)*
TOTAL %	100.0		100.0	
Using a seatbelt during pregnancy				
No	49.2	*(43.9,54.4)*	56.9	*(52.8,61.1)*
Yes	50.8	*(45.6,56.1)*	43.1	*(38.9,47.2)*
TOTAL %	100.0		100.0	
Birth control methods to use after pregnancy				
No	22.4	*(18.0,26.7)*	29.4	*(25.6,33.1)*
Yes	77.6	*(73.3,82.0)*	70.6	*(66.9,74.4)*
TOTAL %	100.0		100.0	
Medicines that are safe to take during pregnancy				
No	13.7	*(10.2,17.2)*	9.1	*(6.7,11.5)*
Yes	86.3	*(82.8,89.8)*	90.9	*(88.6,93.3)*
TOTAL %	100.0		100.0	
How using illegal drugs could affect the baby				
No	33.0	*(28.0,38.0)*	50.8	*(46.7,55.0)*
Yes	67.0	*(62.0,72.0)*	49.2	*(45.0,53.3)*
TOTAL %	100.0		100.0	
Doing tests to screen for birth defects or diseases that run in the family				
No	22.1	*(17.8,26.4)*	17.4	*(14.3,20.5)*
Yes	77.9	*(73.6,82.2)*	82.6	*(79.5,85.7)*
TOTAL %	100.0		100.0	
What to do if labor starts early				
No	20.5	*(16.3,24.8)*	25.2	*(21.6,28.8)*
Yes	79.5	*(75.2,83.7)*	74.8	*(71.2,78.5)*
TOTAL %	100.0		100.0	
Getting blood tested for HIV				
No	22.2	*(17.9,26.5)*	29.7	*(25.9,33.4)*
Yes	77.8	*(73.5,82.1)*	70.3	*(66.6,74.1)*
TOTAL %	100.0		100.0	
Physical abuse to women by their husbands or partners				
No	65.1	*(60.2,70.0)*	81.7	*(78.5,84.9)*
Yes	35.0	*(30.1,39.9)*	18.3	*(15.1,21.5)*
TOTAL %	100.1		100.0	

Table 12. Gravid Status by Health Care Worker Discussions Regarding Various Topics

Topics of discussion	Primipara		Multipara	
	%	95% CI	%	95% CI
How smoking during pregnancy could affect the baby				
No	26.9	*(22.4,31.4)*	36.4	*(32.3,40.5)*
Yes	73.1	*(68.6,77.6)*	63.6	*(59.5,67.7)*
TOTAL %	100.0		100.0	
Breastfeeding the baby				
No	12.6	*(9.2,16.0)*	20.3	*(16.9,23.7)*
Yes	87.4	*(84.0,90.8)*	79.7	*(76.3,83.1)*
TOTAL %	100.0		100.0	
How drinking alcohol during pregnancy could affect the baby				
No	24.5	*(20.1,28.9)*	36.2	*(32.2,40.3)*
Yes	75.5	*(71.1,79.9)*	63.8	*(59.7,67.8)*
TOTAL %	100.0		100.0	
Using a seatbelt during pregnancy				
No	50.2	*(45.2,55.3)*	57.0	*(52.8,61.2)*
Yes	49.8	*(44.7,54.8)*	43.0	*(38.8,47.2)*
TOTAL %	100.0		100.0	
Birth control methods to use after pregnancy				
No	28.8	*(24.2,33.3)*	25.6	*(21.9,29.3)*
Yes	71.2	*(66.7,75.8)*	74.4	*(70.7,78.1)*
TOTAL %	100.0		100.0	
Medicines that are safe to take during pregnancy				
No	8.7	*(5.8,11.6)*	12.4	*(9.7,15.1)*
Yes	91.3	*(88.4,94.2)*	87.6	*(84.9,90.3)*
TOTAL %	100.0		100.0	
How using illegal drugs could affect the baby				
No	37.6	*(32.7,42.5)*	49.4	*(45.2,53.7)*
Yes	62.4	*(57.5,67.3)*	50.6	*(46.3,54.8)*
TOTAL %	100.0		100.0	
Doing tests to screen for birth defects or diseases that run in the family				
No	16.5	*(12.8,20.2)*	20.9	*(17.4,24.3)*
Yes	83.5	*(79.8,87.2)*	79.2	*(75.7,82.6)*
TOTAL %	100.0		100.1	
What to do if labor starts early				
No	22.8	*(18.4,27.1)*	23.9	*(20.3,27.6)*
Yes	77.2	*(72.9,81.6)*	76.1	*(72.5,79.7)*
TOTAL %	100.0		100.0	
Getting blood tested for HIV				
No	23.7	*(19.5,27.9)*	29.2	*(25.4,33.1)*
Yes	76.3	*(72.1,80.5)*	70.8	*(66.9,74.6)*
TOTAL %	100.0		100.0	
Physical abuse to women by their husbands or partners				
No	72.8	*(68.4,77.2)*	77.7	*(74.2,81.2)*
Yes	27.2	*(22.8,31.6)*	22.3	*(18.8,25.8)*
TOTAL %	100.0		100.0	

REFERENCE TABLES 13-16.

- Health care workers are encouraged to discuss food safety issues. The topic of washing hands after contact with soil, sand, litter, or any other material that may be contaminated with

cat feces was the most discussed among respondents in each group (Mecicaid, non-Medicaid, WIC, non-WIC, primiparas and multiparas), with approximately 50 percent of respondents saying they discussed that topic with a health care worker. In contrast, approximately two-thirds of respondents in each of the groups indicated they did not have discussions with a health care worker about any of the remaining food safety issues (i.e., handling raw meat, cooking meat to well done, washing hands and utensils after handling raw meat, and not feeding cats raw or undercooked meat).

- Medicaid recipients were more likely than non-Medicaid recipients to have discussions with health care workers regarding:
  - Cooking meat to "well done" (35.0 percent and 24.0 percent, respectively).
  - Washing hands and utensils after handling raw meat (27.7 percent and 18.6 percent, respectively).

- WIC recipients were more likely than non-WIC recipients to have discussions with health care workers regarding:
  - Handling raw meat (20.7 percent and 11.1 percent, respectively).
  - Cooking meat to "well done" (38.6 percent and 20.7 percent, respectively).
  - Washing hands and utensils after handling raw meat (30.3 percent and 16.1 percent, respectively).
  - Not feeding cats raw or undercooked meat (22.3 percent and 12.4 percent, respectively).

- There was very little difference between primiparas and multiparas, and urban and rural respondents, with respect to discussions with health care workers about food safety issues.

Table 13. Medicaid Status by Health Care Worker Discussions Regarding Food Safety Issues

Food safety issues	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Not touching your mouth or eyes while handling raw meat				
No	81.3	*(77.0,85.5)*	87.0	*(84.3,89.7)*
Yes	18.7	*(14.5,23.0)*	13.0	*(10.3,15.7)*
TOTAL %	100.0		100.0	
Cooking meat to "well done"				
No	65.0	*(59.8,70.2)*	76.0	*(72.6,79.4)*
Yes	35.0	*(29.8,40.2)*	24.0	*(20.6,27.5)*
TOTAL %	100.0		100.0	
Washing hands and utensils after handling raw meat				
No	72.3	*(67.4,77.1)*	81.4	*(78.2,84.5)*
Yes	27.7	*(22.9,32.6)*	18.6	*(15.5,21.8)*
TOTAL %	100.0		100.0	
Washing hands after contact with soil, sand, litter, or any other material that may be contaminated with cat feces				
No	51.2	*(45.7,56.7)*	53.7	*(49.8,57.7)*
Yes	48.8	*(43.3,54.3)*	46.3	*(42.3,50.2)*
TOTAL %	100.0		100.0	
Not feeding cats raw or undercooked meat				
No	80.4	*(76.1,84.6)*	85.4	*(82.5,88.3)*
Yes	19.6	*(15.4,23.9)*	14.6	*(11.7,17.5)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 14. WIC Status by Health Care Worker Discussions Regarding Food Safety Issues

Food safety issues	WIC		Non-WIC	
	%	95% CI	%	95% CI
Not touching your mouth or eyes while handling raw meat				
No	79.3	*(75.1,83.5)*	88.9	*(86.3,91.6)*
Yes	20.7	*(16.5,24.9)*	11.1	*(8.5,13.7)*
TOTAL %	100.0		100.0	
Cooking meat to "well done"				
No	61.4	*(56.4,66.5)*	79.3	*(75.9,82.6)*
Yes	38.6	*(33.5,43.6)*	20.7	*(17.4,24.1)*
TOTAL %	100.0		100.0	
Washing hands and utensils after handling raw meat				
No	69.7	*(64.9,74.5)*	83.9	*(80.8,87.0)*
Yes	30.3	*(25.5,35.1)*	16.1	*(13.0,19.2)*
TOTAL %	100.0		100.0	
Washing hands after contact with soil, sand, litter, or any other material that may be contaminated with cat feces				
No	50.2	*(45.0,55.4)*	54.9	*(50.8,59.0)*
Yes	49.8	*(44.6,55.0)*	45.1	*(41.0,49.2)*
TOTAL %	100.0		100.0	
Not feeding cats raw or undercooked meat				
No	77.7	*(73.3,82.2)*	87.6	*(84.8,90.4)*
Yes	22.3	*(17.9,26.7)*	12.4	*(9.6,15.2)*
TOTAL %	100.0		100.0	

Table 15. Gravid Status by Health Care Worker Discussions Regarding Food Safety Issues

Food safety issues	Primipara		Multipara	
	%	95% CI	%	95% CI
Not touching your mouth or eyes while handling raw meat				
No	85.4	*(82.0,88.9)*	85.6	*(82.6,88.6)*
Yes	14.6	*(11.1,18.0)*	14.4	*(11.4,17.4)*
TOTAL %	100.0		100.0	
Cooking meat to "well done"				
No	70.4	*(65.8,74.9)*	74.8	*(71.2,78.5)*
Yes	29.6	*(25.1,34.2)*	25.2	*(21.5,28.9)*
TOTAL %	100.0		100.0	
Washing hands and utensils after handling raw meat				
No	77.5	*(73.3,81.7)*	79.9	*(76.5,83.3)*
Yes	22.5	*(18.3,26.7)*	20.1	*(16.7,23.6)*
TOTAL %	100.0		100.0	
Washing hands after contact with soil, sand, litter, or any other material that may be contaminated with cat feces				
No	49.5	*(44.4,54.5)*	55.8	*(51.6,60.0)*
Yes	50.5	*(45.5,55.6)*	44.2	*(40.0,48.5)*
TOTAL %	100.0		100.0	
Not feeding cats raw or undercooked meat				
No	81.9	*(78.0,85.9)*	85.8	*(82.8,88.8)*
Yes	18.1	*(14.1,22.0)*	14.3	*(11.3,17.3)*
TOTAL %	100.0		100.1	

Table 16. Urban/Rural Residence by Health Care Worker Discussions Regarding Food Safety Issues

Food safety issues	Urban		Rural	
	%	95% CI	%	95% CI
Not touching your mouth or eyes while handling raw meat				
No	84.9	*(81.5,88.4)*	85.9	*(82.9,88.9)*
Yes	15.1	*(11.7,18.6)*	14.1	*(11.1,17.1)*
TOTAL %	100.0		100.0	
Cooking meat to "well done"				
No	73.1	*(68.9,77.3)*	72.7	*(68.8,76.6)*
Yes	26.9	*(22.7,31.1)*	27.3	*(23.4,31.2)*
TOTAL %	100.0		100.0	
Washing hands and utensils after handling raw meat				
No	79.8	*(75.9,83.6)*	78.0	*(74.3,81.6)*
Yes	20.2	*(16.4,24.1)*	22.1	*(18.4,25.7)*
TOTAL %	100.0		100.1	
Washing hands after contact with soil, sand, litter, or any other material that may be contaminated with cat feces				
No	54.9	*(50.2,59.6)*	51.5	*(47.0,56.0)*
Yes	45.1	*(40.4,49.8)*	48.5	*(44.0,53.0)*
TOTAL %	100.0		100.0	
Not feeding cats raw or undercooked meat				
No	83.8	*(80.2,87.3)*	84.3	*(81.0,87.5)*
Yes	16.2	*(12.7,19.8)*	15.7	*(12.5,19.0)*
TOTAL %	100.0		100.0	

Postpartum Issues

REFERENCE TABLES 17-18.

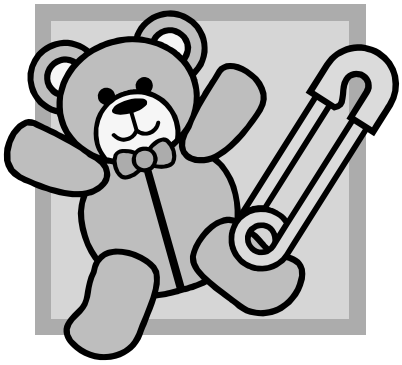
- Respondents spent an average of three nights in the hospital after delivery (data not shown).
- Two-thirds of respondents said their delivery was paid for by health insurance or an HMO. One-third said personal income paid for the delivery. One-fourth said their delivery was paid for by Medicaid.
- Fourteen percent of respondents said that a health care worker did not talk to them about using birth control after their baby was born (data not shown).
- Fourteen percent of respondents said that at the time of the survey they were not doing anything to keep from getting pregnant (data not shown).
- Of respondents who were not doing anything to keep from getting pregnant now, one-third said the reason they were not doing anything was they did not want to use birth control (37.7 percent). One in three respondents said they were not having sex (29.1 percent), while one in ten said their husbands or partners did not want to use anything (13.0 percent). One in 10 indicated they wanted to get pregnant (11.7 percent).
- Several respondents indicated there were other reasons they were not using birth control. Some respondents said they did not want to use birth control for religious reasons, while others said they had side effects from using particular methods. Several said they were not having sex, and others said either they or their husband/partner had surgical procedures done to prevent pregnancy. A few said they wanted to get pregnant.

Table 17. Source of Payment for Delivery

Source of payment for delivery	%	95% CI
Health insurance or HMO	67.3	*(64.9,69.6)*
Personal income	33.5	*(30.6,36.5)*
Medicaid	26.9	*(25.1,28.8)*
Military	6.9	*(5.1,8.6)*
Indian Health Service (IHS)	2.1	*(1.1,3.1)*
Other source	0.9	*(0.4,1.4)*

Table 18. Of Respondents Who Were Not Doing Anything to Keep From Getting Pregnant Now, Respondent's or Husband's/Partner's Reasons For Not Doing Anything to Keep From Getting Pregnant

Reasons	%	95% CI
Does not want to use birth control	37.7	*(29.5,45.9)*
Not having sex	29.1	*(21.6,36.7)*
Husband/partner does not want to use anything	13.0	*(7.4,18.7)*
Wants to get pregnant	11.7	*(6.3,17.1)*
Doesn't think she can get pregnant (sterile)	7.0	*(2.7,11.3)*
Cannot pay for birth control	3.1	*(0.2,6.0)*
Mother is pregnant at time of survey	1.3	*(0.0,3.1)*
Other reasons	30.4	*(22.5,38.2)*



Oral Health Services Utilization

What moms had to say:

"The dentist that I went to never told me to take a lot of calcium when I was pregnant with my 4 year old. So my teeth fell out. So now at 23 I have false teeth."

"Pregnancy is a time when there is a special need for good oral health care because hormonal changes may exaggerate some dental disorders. Regular preventive care is as important during pregnancy as throughout one's lifetime to ward off potential problems."

1999 North Dakota New Mothers' Survey

REFERENCE TABLE 1.

- One in five respondents said that during their pregnancy they needed to see a dentist for a problem (21.4 percent).
- A slight majority of respondents said they did not go to a dentist or dental clinic during their most recent pregnancy (56.5 percent).
- One in three respondents indicated that a dental or health care worker had talked with them about caring for their teeth and gums during their most recent pregnancy (36.1 percent).
- One in three respondents indicated they had not had their teeth cleaned by a dentist or dental hygienist in more than 12 months (32.3 percent).

Table 1. Dental Care Issues During Pregnancy

	%	95% CI
Mother needed to see a dentist for a problem		
No	78.6	*(76.0,81.1)*
Yes	21.4	*(18.9,24.0)*
TOTAL %	100.0	
Mother went to dentist or dental clinic		
No	56.5	*(53.3,59.7)*
Yes	43.5	*(40.3,46.7)*
TOTAL %	100.0	
A dental or health care worker talked with mother about caring for teeth and gums		
No	63.9	*(60.7,67.1)*
Yes	36.1	*(32.9,39.3)*
TOTAL %	100.0	
Number of months since mother had teeth cleaned by a dentist or dental hygienist		
6 months or less	43.9	*(40.6,47.2)*
7 to 12 months	23.7	*(20.8,26.6)*
13 to 18 months	9.8	*(7.9,11.7)*
19 to 24 months	9.5	*(7.5,11.5)*
25 to 36 months	5.8	*(4.3,7.4)*
37 to 48 months	2.9	*(1.8,4.0)*
49 months or longer	4.3	*(3.0,5.6)*
TOTAL %	99.9	

REFERENCE TABLES 2-3.

- A higher proportion of Medicaid than non-Medicaid recipients did not go to the dentist during their pregnancy (68.6 percent and 51.7 percent, respectively).

- A higher proportion of WIC than non-WIC recipients did not go to the dentist during their pregnancy (65.8 percent and 51.4 percent, respectively).

- There was very little difference between primiparas and multiparas with respect to going to a dentist or dental clinic during their pregnancy. Slightly more than half of both primiparas and multiparas said they did not go to a dentist or dental clinic during their pregnancy (56.0 percent and 57.1 percent, respectively).

- Respondents who had more education were more likely than those with less education to go to a dentist or dental clinic during their pregnancy. One-half of respondents who went to a dentist or dental clinic during their pregnancy had 16 or more years of education (52.0 percent), while one-third of respondents who went to see a dentist during their pregnancy had 12 years of education (32.7 percent).

- Respondents who were Native American were three times more likely to not go to a dentist or dental clinic during their pregnancy as to go (74.7 percent and 25.3 percent, respectively).

- Respondents who lived in rural areas were more likely to not go to a dentist or dental clinic during their pregnancy than to go (60.5 percent and 39.5 percent, respectively).

Table 2. Medicaid Status, WIC Status, and Gravid Status by Whether Mother Went to a Dentist or Dental Clinic During Pregnancy

Status	Did not go to dentist		Did go to dentist		TOTAL %
	%	95% CI	%	95% CI	
Medicaid status					
Medicaid*	68.6	*(63.4,73.8)*	31.4	*(26.2,36.6)*	100.0
Non-Medicaid	51.7	*(47.7,55.7)*	48.3	*(44.3,52.3)*	100.0
WIC status					
WIC	65.8	*(60.7,70.9)*	34.2	*(29.2,39.3)*	100.0
Non-WIC	51.4	*(47.3,55.6)*	48.6	*(44.4,52.7)*	100.0
Gravid status					
Primipara	56.0	*(51.0,61.1)*	44.0	*(38.9,49.0)*	100.0
Multipara	57.1	*(52.9,61.3)*	42.9	*(38.7,47.1)*	100.0

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 3. Demographic Characteristics by Whether Mother Went to a Dentist or Dental Clinic During Pregnancy

Demographics	Did not go to dentist		Did go to dentist		TOTAL %
	%	95% CI	%	95% CI	
Mother's education					
8 years or less	NR	*NR*	NR	*NR*	NR
9 to 11 years	60.9	*(47.7,74.0)*	39.1	*(26.0,52.3)*	100.0
12 years	67.3	*(61.2,73.5)*	32.7	*(26.5,38.8)*	100.0
13 to 15 years	56.2	*(50.4,62.0)*	43.8	*(38.0,49.6)*	100.0
16 or more years	48.0	*(42.7,53.3)*	52.0	*(46.7,57.3)*	100.0
Mother's race					
White	54.7	*(51.3,58.1)*	45.3	*(41.9,48.7)*	100.0
Native American	74.7	*(64.4,85.0)*	25.3	*(15.0,35.6)*	100.0
Other	NR	*NR*	NR	*NR*	NR

Demographics	Did not go to dentist		Did go to dentist		TOTAL %
	%	95% CI	%	95% CI	
Urban/rural residence					
Urban	51.8	*(47.0,56.5)*	48.2	*(43.5,53.0)*	100.0
Rural	60.5	*(56.1,64.9)*	39.5	*(35.1,43.9)*	0.0

NOTE: NR means not reportable due to too few responses.

REFERENCE TABLE 4.

- Respondents whose prenatal care was paid for by Medicaid were twice as likely to not go to a dentist or dental clinic during their pregnancy as to go (69.4 percent and 30.6 percent, respectively). Similarly, respondents who did not have insurance or an HMO were twice as likely to not go to a dentist during their pregnancy as to go (64.9 percent and 35.2 percent, respectively).

- Respondents whose prenatal care was paid for by the Indian Health Service were three times as likely to not go to a dentist or dental clinic during their pregnancy as to go (74.9 percent and 25.1 percent, respectively).

Table 4. Sources of Payment for Prenatal Care by Whether Mother Went to a Dentist or Dental Clinic During Pregnancy

Sources of payment for prenatal care	Did not go to dentist		Did go to dentist		TOTAL %
	%	95% CI	%	95% CI	
Medicaid	69.4	*(64.0,74.8)*	30.6	*(25.2,36.0)*	100.0
Not Medicaid	52.4	*(48.5,56.3)*	47.6	*(43.7,51.5)*	100.0
Personal income	58.9	*(52.8,64.9)*	41.1	*(35.1,47.2)*	100.0
Not personal income	55.3	*(51.5,59.1)*	44.7	*(40.9,48.5)*	100.0
Insurance or HMO	52.2	*(48.1,56.3)*	47.8	*(43.7,51.9)*	100.0
Not insurance or HMO	64.9	*(59.6,70.1)*	35.2	*(29.9,40.4)*	100.1
Indian Health Service	74.9	*(60.0,89.7)*	25.1	*(10.3,40.0)*	100.0
Not Indian Health Service	55.6	*(52.3,58.9)*	44.4	*(41.1,47.7)*	100.0
Military	48.5	*(35.2,61.9)*	51.5	*(38.2,64.9)*	100.0
Not military	57.1	*(53.8,60.5)*	42.9	*(39.5,46.2)*	100.0
Other	NR	*NR*	NR	*NR*	NR
Not other	56.4	*(53.1,59.6)*	43.6	*(40.4,46.9)*	100.0

NOTE: NR means not reportable due to too few responses.

REFERENCE TABLES 5-6.

- Approximately two-thirds of white respondents indicated that discussions about oral care with a dental or health care worker did not take place (62.3 percent). Sixteen percent of Native American respondents reported having had a dental or health care worker talk with them about oral care.

- One-fifth of white respondents reported needing to see a dentist for a problem during their pregnancy, and one-third of Native Americans indicated they needed to see a dentist (36.9 percent).

Table 5. Medicaid Status, WIC Status, Gravid Status and Race by Whether Dental or Health Care Worker Talked About Oral Care

Status/race	Did not talk about oral care		Did talk about oral care		TOTAL %
	%	95% CI	%	95% CI	
Medicaid status					
Medicaid*	67.0	*(61.7,72.3)*	33.0	*(27.7,38.3)*	100.0
Non-Medicaid	62.8	*(58.9,66.7)*	37.2	*(33.3,41.1)*	100.0
WIC status					
WIC	67.4	*(62.5,72.3)*	32.6	*(27.7,37.5)*	100.0
Non-WIC	61.9	*(57.8,66.0)*	38.1	*(34.0,42.2)*	100.0
Gravid status					
Primipara	64.5	*(59.6,69.4)*	35.5	*(30.6,40.4)*	100.0
Multipara	63.7	*(59.6,67.9)*	36.3	*(32.2,40.4)*	100.0
Mother's race					
White	62.3	*(59.0,65.7)*	37.7	*(34.3,41.0)*	100.0
Native American	84.0	*(76.6,91.4)*	16.0	*(8.6,23.4)*	100.0
Other	NR	*NR*	NR	*NR*	NR

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.
NOTE: NR means not reportable due to too few responses.

Table 6. Race by Whether Mother Needed to See a Dentist for a Problem During Pregnancy

Mother's race	Yes, needed to see a dentist		No, did not need to see a dentist		TOTAL %
	%	95% CI	%	95% CI	
White	20.0	*(17.3,22.7)*	80.0	*(77.3,82.7)*	100.0
Native American	36.9	*(26.0,47.8)*	63.1	*(52.2,74.0)*	100.0
Other	NR	*NR*	NR	*NR*	NR

NOTE: NR means not reportable due to too few responses.

REFERENCE TABLES 7-11.

- Respondents who were non-Medicaid recipients were more likely than Medicaid recipients to have had their teeth cleaned within the last 12 months (71.0 percent and 59.1 percent, respectively).
- Respondents who were non-WIC recipients were more likely than WIC recipients to have had their teeth cleaned within the last 12 months (71.3 percent and 60.6 percent, respectively).
- Proportions of primiparas and multiparas who reported having had their teeth cleaned within the last 12 months were similar (66.4 percent and 68.3 percent, respectively).
- Respondents who were white were more likely than respondents who were Native American to have had their teeth cleaned within the last 12 months (68.2 percent and 57.5 percent, respectively).
- Respondents who lived in urban areas were more likely than respondents who lived in rural areas to have had their teeth cleaned in the last 12 months (71.8 percent and 63.8 percent, respectively).

Table 7. Medicaid Status by Number of Months Since Mother Last Had Her Teeth Cleaned

Number of months since mother last had her teeth cleaned	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
6 months or less	38.9	*(33.3,44.6)*	45.8	*(41.7,49.8)*
7 to 12 months	20.2	*(15.4,25.0)*	25.2	*(21.6,28.7)*
13 to 18 months	10.2	*(6.8,13.6)*	9.6	*(7.3,12.0)*
19 to 24 months	12.4	*(8.3,16.4)*	8.5	*(6.2,10.8)*
25 to 36 months	7.3	*(5.9,8.6)*	5.4	*(3.5,7.3)*
37 to 48 months	4.2	*(2.0,6.4)*	2.4	*(1.2,3.6)*
49 months or more	6.9	*(3.9,10.0)*	3.1	*(1.7,4.5)*
TOTAL %	100.1		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 8. WIC Status by Number of Months Since Mother Last Had Her Teeth Cleaned

Number of months since mother last had her teeth cleaned	WIC		Non-WIC	
	%	95% CI	%	95% CI
6 months or less	37.8	*(32.5,43.1)*	46.9	*(42.7,51.1)*
7 to 12 months	22.8	*(18.1,27.5)*	24.4	*(20.7,28.0)*
13 to 18 months	10.9	*(7.6,14.1)*	9.3	*(6.9,11.7)*
19 to 24 months	10.9	*(7.5,14.4)*	8.6	*(6.2,11.1)*
25 to 36 months	7.2	*(5.9,8.6)*	5.1	*(3.2,7.1)*
37 to 48 months	3.3	*(1.5,5.0)*	2.7	*(1.4,4.1)*
49 months or more	7.1	*(4.3,9.8)*	2.9	*(1.5,4.3)*
TOTAL %	100.0		99.9	

Table 9. Gravid Status by Number of Months Since Mother Last Had Her Teeth Cleaned

Number of months since mother last had her teeth cleaned	Primiparas		Multiparas	
	%	95% CI	%	95% CI
6 months or less	41.2	*(36.1,46.3)*	45.7	*(41.4,50.1)*
7 to 12 months	25.2	*(20.5,29.8)*	22.6	*(19.0,26.3)*
13 to 18 months	10.7	*(7.6,13.8)*	9.2	*(6.7,11.7)*
19 to 24 months	10.3	*(7.1,13.5)*	9.0	*(6.4,11.6)*
25 to 36 months	6.6	*(4.1,9.1)*	5.3	*(4.0,6.7)*
37 to 48 months	2.0	*(0.7,3.2)*	3.6	*(2.0,5.2)*
49 months or more	4.1	*(2.2,6.1)*	4.5	*(2.7,6.3)*
TOTAL %	100.1		99.9	

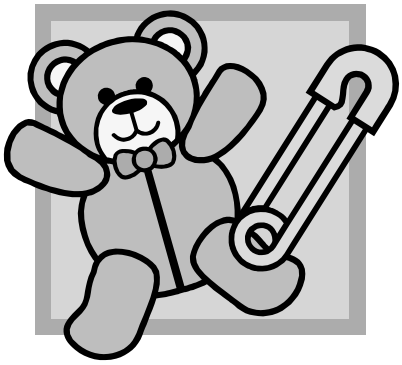
Table 10. Race by Number of Months Since Mother Last Had Her Teeth Cleaned

Number of months since mother last had her teeth cleaned	White		Native American		Other	
	%	95% CI	%	95% CI	%	95% CI
6 months or less	45.3	*(41.8,48.8)*	24.1	*(13.8,34.4)*	NR	*NR*
7 to 12 months	22.9	*(19.9,25.9)*	33.4	*(21.8,45.0)*	NR	*NR*
13 to 18 months	10.1	*(8.0,12.1)*	6.8	*(1.1,12.4)*	NR	*NR*
19 to 24 months	9.1	*(7.1,11.2)*	16.6	*(6.4,26.9)*	NR	*NR*
25 to 36 months	5.3	*(3.8,6.9)*	13.0	*(11.6,14.3)*	NR	*NR*
37 to 48 months	3.1	*(2.0,4.3)*	1.0	*(0.0,2.8)*	NR	*NR*
49 months or more	4.2	*(2.8,5.5)*	5.1	*(0.2,10.0)*	NR	*NR*
TOTAL %	100.0		100.0		NR	

NOTE: NR means not reportable due to too few responses.

Table 11. Urban/Rural Residence by Number of Months Since Mother Last Had Her Teeth Cleaned

Number of months since mother last had her teeth cleaned	Urban		Rural	
	%	95% CI	%	95% CI
6 months or less	47.9	*(43.1,52.8)*	40.3	*(35.8,44.9)*
7 to 12 months	23.9	*(19.7,28.0)*	23.5	*(19.5,27.5)*
13 to 18 months	8.5	*(5.9,11.1)*	11.0	*(8.2,13.8)*
19 to 24 months	7.8	*(5.1,10.5)*	11.1	*(8.2,14.0)*
25 to 36 months	5.8	*(3.6,7.9)*	5.9	*(4.5,7.3)*
37 to 48 months	2.1	*(0.8,3.3)*	3.7	*(2.0,5.3)*
49 months or more	4.1	*(2.2,6.1)*	4.5	*(2.7,6.3)*
TOTAL %	100.1		100.0	



Maternal Lifestyle and Health Characteristics

What moms had to say:

"I think more education should be done on the importance of multivitamins & especially folic acid during childbearing years. Not enough women know the importance of this. Maybe more billboards & posters should be made with this info on it."

"Even though you may not think much about it or think, like I do, "It won't happen to me", it can happen. Guilt is one of the worst feelings in the world. Every day I wonder if I might have caused a problem with my baby. So far, nothing is wrong, but, maybe someday I'll find out differently. I pray that day will NEVER come. If it does, I will have no one else to blame but myself. Message to all: STAY FREE!"

"In my experience the free classes given from the hospital were very helpful. The doctors don't seem to have time to spend. If I had a question the doctor would answer but never any additional information was given if there were no questions."

"It is only 10 months out of your life. Please do not ever drink, smoke or put the baby or yourself in harms way. If you are afraid or cannot leave a situation seek help!! You have that choice- your baby doesn't. They are Forced to go or be wherever you choose. Make the right choice!! Thanks for letting me be a part of this survey. I hope my answers help make N.D. Mothers and Babies healthier!"

"More teaching on the effects of smoking and 2nd hand smoke does to your baby. My friend told me she saw on the learning channel of when a mother was smoking and the baby stopped breathing. It would be good to show a video like that so mothers can see what happens. Telling them doesn't always work! Thanks."

"I didn't drink anything for the first 3 months of my pregnancy. The next 3 1/2 mos. I would have one beer every week to every other week. The last 2 1/2 months I didn't drink at all. I cut down on my smoking & switched from Reds to Lights."

"I think that drinking and smoking during pregnancy is a big, big issue on the reservations. I have 2 friends who were pregnant at the same time I was, and I told them they shouldn't drink but they don't listen, and women have to understand once they become pregnant whatever they take into their body, their babies take in so I think women on the reservations need to become educated on these issues! Thank you!

Discussions With Health Care Workers

REFERENCE TABLE 1.

- At least two-thirds of respondents had discussions with health care workers regarding how smoking during pregnancy could affect the baby, breastfeeding, how drinking alcohol during pregnancy could affect the baby, birth control methods to use after pregnancy, medicines that are safe to take during pregnancy, doing tests to screen for diseases that run in the family, what to do if labor starts early, and getting blood tested for HIV.

- Approximately half of respondents had discussions with health care workers about using a seat belt during pregnancy, how using illegal drugs could affect their baby, and washing hands after contact with any material that may be contaminated with cat feces (e.g., soil, sand, litter).

- At most, one-fourth of respondents had discussions with health care workers regarding physical abuse to women by their husbands or partners, touching their mouth or eyes while handling raw meat, cooking meat to "well done," washing hands and utensils after handling raw meat, and not feeding cats raw or undercooked meat.

Table 1. Whether Respondents Had Discussions With Health Care Professionals Regarding Various Topics

Topics of Discussion	%	95% CI
How smoking during pregnancy could affect the baby		
No	32.3	*(29.2,35.3)*
Yes	67.7	*(64.7,70.8)*
TOTAL %	100.0	
Breastfeeding the baby		
No	17.0	*(14.6,19.5)*
Yes	83.0	*(80.5,85.4)*
TOTAL %	100.0	
How drinking alcohol during pregnancy could affect the baby		
No	31.3	*(28.3,34.3)*
Yes	68.7	*(65.7,71.7)*
TOTAL %	100.0	
Using a seatbelt during pregnancy		
No	54.0	*(50.8,57.3)*
Yes	46.0	*(42.7,49.2)*
TOTAL %	100.0	
Birth control methods to use after pregnancy		
No	26.9	*(24.0,29.7)*
Yes	73.1	*(70.3,76.0)*
TOTAL %	100.0	
Medicines that are safe to take during pregnancy		
No	10.8	*(8.8,12.8)*
Yes	89.2	*(87.2,91.2)*
TOTAL %	100.0	
How using illegal drugs could affect the baby		
No	44.4	*(41.2,47.6)*
Yes	55.6	*(52.4,58.8)*
TOTAL %	100.0	
Doing tests to screen for birth defects or diseases that run		

Topics of Discussion	%	95% CI
in the family		
No	19.1	*(16.6,21.6)*
Yes	80.9	*(78.4,83.4)*
TOTAL %	100.0	
What to do if labor starts early		
No	23.4	*(20.6,26.2)*
Yes	76.6	*(73.8,79.4)*
TOTAL %	100.0	
Getting blood tested for HIV		
No	26.9	*(24.0,29.7)*
Yes	73.1	*(70.3,76.0)*
TOTAL %	100.0	
Physical abuse to women by their husbands or partners		
No	75.6	*(72.9,78.4)*
Yes	24.4	*(21.6,27.1)*
TOTAL %	100.0	
Not touching mouth or eyes while handling raw meat		
No	85.4	*(83.2,87.7)*
Yes	14.6	*(12.3,16.8)*
TOTAL %	100.0	
Cooking meat to "well done"		
No	72.9	*(70.0,75.7)*
Yes	27.1	*(24.3,30.0)*
TOTAL %	100.0	
Washing hands and utensils after handling raw meat		
No	78.8	*(76.2,81.4)*
Yes	21.2	*(18.6,23.8)*
TOTAL %	100.0	
Washing hands after contact with soil, sand, litter, or any other material that may be contaminated with cat feces		
No	53.1	*(49.9,56.3)*
Yes	46.9	*(43.7,50.1)*
TOTAL %	100.0	
Not feeding cats raw or undercooked meat		
No	84.1	*(81.7,86.4)*
Yes	16.0	*(13.6,18.3)*
TOTAL %	100.1	

Tobacco Use

> "Tobacco use during pregnancy has long been associated with a number of adverse outcomes, including low birthweight, intrauterine growth retardation, miscarriage, and infant mortality, as well as negative consequences for child health and development. Substantial costs result from these adverse outcomes."
>
> *National Vital Statistics Reports, Births: Final Data for 2002. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, and National Vital Statistics System.*

REFERENCE TABLE 2.

- Of all respondents, 29 percent said they smoked at least 100 cigarettes in the past two years.
- Slightly fewer, 26 percent, said they were smoking three months before their pregnancy.
- Sixteen percent of all respondents were smoking during the last three months of pregnancy.
- Twenty-two percent of all respondents were smoking at the time of the survey.
- Two-thirds of respondents said that a health care worker talked with them during a prenatal care visit about how smoking could affect their baby (67.7 percent).

Table 2. Smoking Behaviors and Related Discussions of All Respondents

Smoking behaviors and related discussions	%	95% CI
Whether respondent smoked at least 100 cigarettes in the past two years		
No	70.6	*(67.8,73.4)*
Yes	29.4	*(26.6,32.2)*
TOTAL %	100.0	
Whether respondent smoked 3 months before pregnancy		
No	73.6	*(70.8,76.4)*
Yes	26.4	*(23.6,29.2)*
TOTAL %	100.0	
Whether respondent smoked last 3 months of pregnancy		
No	84.4	*(82.1,86.6)*
Yes	15.6	*(13.4,17.9)*
TOTAL %	100.0	
Whether respondent was smoking at time of survey		
No	78.2	*(75.6,80.7)*
Yes	21.8	*(19.3,24.4)*
TOTAL %	100.0	
During a prenatal care visit, whether health care worker talked about how smoking during pregnancy could affect the baby		
No	32.3	*(29.2,35.3)*
Yes	67.7	*(64.7,70.8)*
TOTAL %	100.0	

REFERENCE TABLE 3.

- Changes in smoking behavior from three months before their pregnancy to last three months of pregnancy:
    - Overall, three-fourths of respondents were nonsmokers (73.9 percent).
    - Eleven percent were smokers who quit, while an additional 11 percent had reduced the number of cigarettes they smoked per day.
    - Four percent smoked the same number of cigarettes per day or more.

- Changes in smoking behavior from before pregnancy to time of survey:
    - Three-fourths of respondents were nonsmokers (73.3 percent).
    - Six percent of respondents had quit smoking and 9 percent smoked fewer cigarettes.
    - Eleven percent smoked the same number of cigarettes or increased the number of cigarettes they smoked per day, and 0.1 percent started smoking.

- Changes in smoking behavior from last three months of pregnancy to time of survey:
    - Three-fourths of respondents were nonsmokers throughout their entire pregnancy (78.3 percent).
    - Less than half a percent of respondents quit smoking and 1 percent smoked fewer cigarettes.
    - Fifteen percent smoked the same number of cigarettes or increased the number of cigarettes they smoked per day, and 6 percent started smoking.

Table 3. Changes in Smoking Behavior Among All Respondents

Changes in smoking behavior	%	95% CI
Changes in smoking behavior from 3 months before pregnancy to last 3 months of pregnancy		
Nonsmoker	73.9	*(71.2,76.7)*
Smoker who quit	11.2	*(9.2,13.2)*
Number of cigarettes smoked per day reduced	11.3	*(9.3,13.3)*
Number of cigarettes smoked per day same or more	3.5	*(2.4,4.7)*
Nonsmoker who started	0.0	*(0.0,0.0)*
TOTAL %	99.9	
Changes in smoking behavior from 3 months before pregnancy to time of survey		
Nonsmoker	73.3	*(70.5,76.1)*
Smoker who quit	5.9	*(4.3,7.4)*
Number of cigarettes smoked per day reduced	9.0	*(7.2,10.7)*
Number of cigarettes smoked per day same or more	11.3	*(9.3,13.3)*
Nonsmoker who started	0.6	*(0.0,1.2)*
TOTAL %	100.1	
Changes in smoking behavior from last 3 months of pregnancy to time of survey		
Nonsmoker	78.3	*(75.8,80.9)*
Smoker who quit	0.3	*(0.0,0.5)*
Number of cigarettes smoked per day reduced	0.6	*(0.3,1.0)*
Number of cigarettes smoked per day same or more	14.5	*(12.3,16.8)*
Nonsmoker who started	6.3	*(4.8,7.7)*
TOTAL %	100.0	

REFERENCE TABLES 4-5.

- Respondents who smoked three months before their pregnancy were more likely to be exposed to cigarette smoke at work than respondents who did not smoke (30.4 percent and 5.5 percent, respectively).

- Sixteen percent of respondents who gave birth to low birthweight infants (2,499 grams or less) said they were exposed to secondhand smoke at their job. Caution should be used when interpreting data regarding low birthweight infants and the mother's exposure to secondhand smoke due to small numbers.

Table 4. Whether Respondent Smoked 3 Months Before Pregnancy by Whether Respondent is Exposed to Secondhand Smoke at Work

Whether respondent was exposed to secondhand smoke at her job	No, did not smoke 3 months before pregnancy		Yes, did smoke 3 months before pregnancy	
	%	95% CI	%	95% CI
Not exposed to secondhand smoke at work	84.6	*(81.8,87.4)*	54.7	*(48.4,61.0)*
Exposed to secondhand smoke at work	5.5	*(3.6,7.4)*	30.4	*(24.5,36.4)*
Did not work outside the home	9.9	*(7.6,12.2)*	14.8	*(10.6,19.1)*
TOTAL %	100.0		99.9	

Table 5. Infant Birthweight by Whether Respondent Was Exposed to Secondhand Smoke at Her Job

Whether respondent was exposed to secondhand smoke at her job	Infant birthweight			
	Low (2,499 grams or less)*		Not low (2,500 grams or more)	
	%	95% CI	%	95% CI
Not exposed to secondhand smoke at work	73.4	*(61.2,85.6)*	75.6	*(72.8,78.5)*
Exposed to secondhand smoke at work	16.2	*(6.2,26.1)*	12.9	*(10.6,15.2)*
Did not work outside the home	10.4	*(2.5,18.3)*	11.4	*(9.4,13.5)*
TOTAL %	100.0		99.9	

*Caution should be used when interpreting data regarding low birthweight infants and the mother's exposure to secondhand smoke due to small numbers.

PLEASE NOTE: This next section of the report represents respondents who were smoking three months before pregnancy (26 percent of all respondents). While analysis is presented throughout the section, due to the nature of this smaller sample size, caution should be used when interpreting these data. The reader will want to pay particular attention to the confidence intervals depending on how the data will be used, e.g., for policy-making purposes, funding allocations, etc.

Respondents Who Were Smoking Three Months Before Pregnancy

REFERENCE TABLE 6.

- The average number of cigarettes smoked per day in the three months before pregnancy was 14 (data not shown).

- Changes in smoking behavior from three months before pregnancy to last three months of pregnancy:
    - Forty-three percent of respondents were smokers who quit, and 43 percent smoked fewer cigarettes per day.
    - Fourteen percent indicated they smoked the same number of cigarettes per day or more.

- Changes in smoking behavior from three months before pregnancy to time of survey:
    - Twenty-two percent of respondents had quit smoking and 34 percent smoked fewer cigarettes.
    - Forty-three percent smoked the same number of cigarettes or increased the number of cigarettes they smoked per day.

- Changes in smoking behavior from last three months of pregnancy to time of survey:
    - Twenty-one percent of respondents were nonsmokers.
    - One percent quit smoking and 2 percent smoked fewer cigarettes.
    - Fifty-four percent smoked the same number of cigarettes or increased the number of cigarettes they smoked per day, and 22 percent started smoking.

- The average number of cigarettes smoked per day at the time of the survey was 11 (data not shown).

Table 6. Among Respondents Who Were Smoking 3 Months Before Pregnancy, Changes in Smoking Behavior

Changes in smoking behavior	%	95% CI
Changes in smoking behavior from 3 months before pregnancy to last 3 months of pregnancy		
Nonsmoker	0.0	*(0.0,0.0)*
Smoker who quit	43.1	*(36.5,49.6)*
Number of cigarettes per day reduced	43.4	*(36.9,50.0)*
Number of cigarettes per day the same or more	13.5	*(9.1,18.0)*
Nonsmoker who started	0.0	*(0.0,0.0)*
TOTAL %	100.0	
Changes in smoking behavior from 3 months before pregnancy to time of survey		
Nonsmoker	0.0	*(0.0,0.0)*
Smoker who quit	22.4	*(16.9,28.0)*
Number of cigarettes per day reduced	34.3	*(28.1,40.4)*
Number of cigarettes per day the same or more	43.3	*(36.7,49.9)*
Nonsmoker who started	0.0	*(0.0,0.0)*
TOTAL %	100.0	

Changes in smoking behavior	%	95% CI
Changes in smoking behavior from last 3 months of pregnancy to time of survey		
Nonsmoker	21.1	*(15.6,26.7)*
Smoker who quit	1.1	*(0.1,2.2)*
Number of cigarettes per day reduced	2.1	*(0.7,3.5)*
Number of cigarettes per day the same or more	53.8	*(47.2,60.4)*
Nonsmoker who started	21.9	*(16.5,27.2)*
TOTAL %	100.0	

REFERENCE TABLE 7.

- A higher proportion of non-Medicaid than Medicaid recipients indicated they smoked between a half pack and a pack of cigarettes per day (10 to 19 cigarettes) (33.7 percent and 23.2 percent, respectively) in the three months prior to pregnancy. However, a higher proportion of Medicaid recipients reported smoking anywhere from a pack to a pack and a half of cigarettes daily (20 to 29 cigarettes) (38.2 percent and 29.2 percent, respectively).

- A higher proportion of Medicaid than non-Medicaid recipients said a health care worker talked with them about the effects of smoking during pregnancy (85.8 percent and 78.0 percent, respectively).

- A higher proportion of non-Medicaid than Medicaid recipients had quit smoking by the last three months of pregnancy (50.3 percent and 34.3 percent, respectively).

- Medicaid recipients were more likely than non-Medicaid recipients to have been told to quit smoking by a health care worker (58.4 percent and 39.4 percent, respectively).

- Changes in smoking behavior from three months before pregnancy to last three months of pregnancy:
    - Medicaid recipients were more likely than non-Medicaid recipients to reduce the number of cigarettes smoked (51.0 percent and 37.0 percent, respectively), and less likely to quit smoking (34.3 percent an 50.3 percent, respectively).

- Changes in smoking behavior from three months before pregnancy to time of survey:
    - A higher proportion of non-Medicaid than Medicaid recipients indicated they had quit smoking (27.3 percent and 17.0 percent, respectively).
    - One-third of both Medicaid and non-Medicaid recipients said they reduced the number of cigarettes smoked (37.7 percent and 31.4 percent, respectively).
    - Two-fifths of both Medicaid and non-Medicaid recipients stated they smoked the same amount of cigarettes or more (45.3 percent and 41.3 percent, respectively).

- Changes in smoking behavior from last three months of pregnancy to time of survey:
    - Medicaid recipients were less likely than non-Medicaid recipients to be nonsmokers (14.7 percent and 27.0 percent, respectively).
    - Fifty-nine percent of Medicaid recipients and 50 percent of non-Medicaid recipients said they smoked the same amount or increased the number of cigarettes smoked.
    - Twenty percent of both Medicaid and non-Medicaid recipients indicated they were nonsmokers who started (19.3 percent and 23.4 percent, respectively).

Table 7. Among Respondents Who Were Smoking 3 Months Before Pregnancy, Medicaid Status by Smoking Related Questions

Smoking related questions	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Number of cigarettes smoked per day 3 months before pregnancy				
None	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
1 to 9	31.8	*(23.9,39.7)*	29.3	*(20.5,38.1)*
10 to 19	23.2	*(16.4,30.1)*	33.7	*(24.2,43.1)*
20 to 29	38.2	*(29.7,46.7)*	29.2	*(20.5,37.8)*
30 to 39	1.7	*(0.0,3.5)*	2.4	*(0.0,5.1)*
40 or more	5.1	*(1.9,8.3)*	5.5	*(0.7,10.4)*
TOTAL %	100.0		100.1	
During a prenatal care visit, whether health care worker talked about how smoking during pregnancy could affect the baby				
No	14.2	*(8.4,20.0)*	22.0	*(14.1,29.9)*
Yes	85.8	*(80.0,91.6)*	78.0	*(70.1,85.9)*
TOTAL %	100.0		100.0	
Advice given to respondents from health care worker on dangers of smoking during pregnancy				
Told me to quit	58.4	*(49.4,67.3)*	39.4	*(29.3,49.6)*
Told me to cut down	18.0	*(10.2,25.8)*	19.2	*(11.2,27.3)*
Didn't talk to me, even though I smoke	5.6	*(1.8,9.3)*	5.4	*(0.8,10.0)*
Didn't talk to me because I don't smoke	11.8	*(6.0,17.6)*	17.5	*(9.9,25.1)*
Other	6.3	*(2.0,10.6)*	18.5	*(10.4,26.5)*
TOTAL %	100.1		100.0	
Changes in smoking behavior from 3 months before pregnancy to last 3 months of pregnancy				
Nonsmoker	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
Smoker who quit	34.3	*(26.4,42.3)*	50.3	*(40.4,60.2)*
Number of cigarettes smoked per day reduced	51.0	*(42.4,59.6)*	37.0	*(27.3,46.7)*
Number of cigarettes smoked per day same or more	14.7	*(8.4,21.0)*	12.7	*(6.4,19.0)*
Nonsmoker who started	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.0	
Changes in smoking behavior from 3 months before pregnancy to time of survey				
Nonsmoker	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
Smoker who quit	17.0	*(10.6,23.4)*	27.3	*(18.5,36.1)*
Number of cigarettes smoked per day reduced	37.7	*(29.7,45.7)*	31.4	*(22.2,40.7)*
Number of cigarettes smoked per day same or more	45.3	*(36.6,54.0)*	41.3	*(31.7,50.8)*
Nonsmoker who started	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.0	
Changes in smoking behavior from last 3 months of pregnancy to time of survey				
Nonsmoker	14.7	*(8.5,20.8)*	27.0	*(18.1,35.8)*
Smoker who quit	2.4	*(0.1,4.7)*	0.0	*(0.0,0.0)*
Number of cigarettes smoked per day reduced	4.7	*(1.6,7.8)*	0.0	*(0.0,0.0)*
Number of cigarettes smoked per day same or more	58.9	*(50.6,67.2)*	49.7	*(39.8,59.6)*
Nonsmoker who started	19.3	*(13.0,25.6)*	23.4	*(15.2,31.5)*
TOTAL %	100.0		100.1	
Whether respondent smoked last 3 months of pregnancy				

Smoking related questions	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
No	34.3	*(26.4,42.3)*	50.3	*(40.4,60.2)*
Yes	65.7	*(57.7,73.6)*	49.7	*(39.8,59.6)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.
NOTE: Caution should be used when interpreting data in this table due to small numbers.

REFERENCE TABLE 8.

- Proportions were similar between WIC and non-WIC recipients with respect to the number of cigarettes smoked in the three months prior to pregnancy.

- A higher proportion of WIC than non-WIC recipients said a health care worker talked with them about the effects of smoking during pregnancy (85.9 percent and 76.1 percent, respectively).

- WIC recipients were:
    - More likely than non-WIC recipients to have been told to quit smoking by a health care worker (56.0 percent and 39.1 percent, respectively).
    - More likely than non-WIC recipients to have smoked during the last three months of pregnancy (65.4 percent and 45.9 percent, respectively).

- Changes in smoking behavior from three months before pregnancy to last three months of pregnancy:
    - WIC recipients were more likely than non-WIC recipients to reduce the number of cigarettes smoked (51.2 percent and 33.2 percent, respectively), and less likely to quit smoking (34.6 percent and 54.1 percent, respectively).

- Changes in smoking behavior from three months before pregnancy to time of survey:
    - WIC recipients were less likely than non-WIC recipients to have quit smoking (13.8 percent and 33.6 percent, respectively).
    - A higher proportion of WIC than non-WIC recipients reduced the number of cigarettes smoked (38.6 percent and 28.7 percent, respectively).
    - A higher proportion of WIC than non-WIC recipients smoked the same number of cigarettes or more (47.6 percent and 37.7 percent, respectively).

- Changes in smoking behavior from last three months of pregnancy to time of survey:
    - WIC recipients were less likely than non-WIC recipients to be nonsmokers (12.5 percent and 32.4 percent, respectively).
    - WIC recipients were more likely than non-WIC recipients to have smoked the same amount or increased the number of cigarettes smoked (60.4 percent and 45.1 percent, respectively).
    - One-fifth of both WIC and non-WIC recipients were nonsmokers who started (22.4 percent and 21.2 percent, respectively).

Table 8. Among Respondents Who Were Smoking 3 Months Before Pregnancy, WIC Status by Smoking Related Questions

Smoking related questions	WIC		Non-WIC	
	%	95% CI	%	95% CI
Number of cigarettes smoked per day 3 months before pregnancy				
None	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
1 to 9	29.5	*(21.9,37.1)*	32.9	*(23.4,42.4)*
10 to 19	29.4	*(21.6,37.2)*	27.7	*(18.2,37.1)*
20 to 29	31.8	*(23.9,39.8)*	34.7	*(25.1,44.4)*

Smoking related questions	WIC		Non-WIC	
	%	95% CI	%	95% CI
30 to 39	2.2	*(0.0,4.4)*	1.8	*(0.0,4.4)*
40 or more	7.1	*(2.4,11.9)*	2.9	*(0.0,5.7)*
TOTAL %	100.0		100.0	
During a prenatal care visit, whether health care worker talked about how smoking during pregnancy could affect the baby				
No	14.1	*(8.3,19.9)*	23.9	*(15.3,32.5)*
Yes	85.9	*(80.1,91.7)*	76.1	*(67.5,84.7)*
TOTAL %	100.0		100.0	
Advice given to respondents from health care worker on dangers of smoking during pregnancy				
Told me to quit	56.0	*(46.9,65.0)*	39.1	*(29.0,49.2)*
Told me to cut down	21.7	*(13.8,29.7)*	14.9	*(7.3,22.5)*
Didn't talk to me, even though I smoke	5.3	*(1.6,9.1)*	5.6	*(0.8,10.4)*
Didn't talk to me because I don't smoke	10.1	*(4.9,15.4)*	20.5	*(12.0,29.0)*
Other	6.8	*(2.4,11.3)*	19.9	*(11.1,28.7)*
TOTAL %	99.9		100.0	
Changes in smoking behavior from 3 months before pregnancy to last 3 months of pregnancy				
Nonsmoker	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
Smoker who quit	34.6	*(26.6,42.6)*	54.1	*(43.9,64.4)*
Number of cigarettes smoked per day reduced	51.2	*(42.7,59.8)*	33.2	*(23.6,42.9)*
Number of cigarettes smoked per day same or more	14.2	*(8.2,20.2)*	12.6	*(6.0,19.3)*
Nonsmoker who started	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		99.9	
Changes in smoking behavior from 3 months before pregnancy to time of survey				
Nonsmoker	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
Smoker who quit	13.8	*(8.0,19.6)*	33.6	*(23.8,43.5)*
Number of cigarettes smoked per day reduced	38.6	*(30.4,46.8)*	28.7	*(19.4,38.0)*
Number of cigarettes smoked per day same or more	47.6	*(39.0,56.2)*	37.7	*(27.8,47.5)*
Nonsmoker who started	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.0	
Changes in smoking behavior from last 3 months of pregnancy to time of survey				
Nonsmoker	12.5	*(6.8,18.3)*	32.4	*(22.5,42.3)*
Smoker who quit	1.4	*(0.0,2.9)*	0.7	*(0.0,2.1)*
Number of cigarettes smoked per day reduced	3.3	*(1.0,5.6)*	0.6	*(0.0,1.8)*
Number of cigarettes smoked per day same or more	60.4	*(52.2,68.6)*	45.1	*(34.8,55.4)*
Nonsmoker who started	22.4	*(15.6,29.2)*	21.2	*(12.8,29.6)*
TOTAL %	100.0		100.0	
Whether respondent smoked last 3 months of pregnancy				
No	34.6	*(26.6,42.6)*	54.1	*(43.9,64.4)*
Yes	65.4	*(57.4,73.4)*	45.9	*(35.6,56.1)*
TOTAL %	100.0		100.0	

NOTE: Caution should be used when interpreting data in this table due to small numbers.

REFERENCE TABLE 9.

- Proportions were similar between primiparas and multiparas with respect to the number of cigarettes smoked in the three months prior to pregnancy.

- A large majority of primiparas and multiparas said a health care worker talked with them about the effects of smoking during pregnancy (84.4 percent and 79.2 percent, respectively).

- One-half of both primiparas and multiparas said they were told to quit smoking by a health care worker (50.0 percent and 46.1 percent, respectively), and one-fifth were told to cut down (21.6 percent and 16.0 percent, respectively).

- Changes in smoking behavior from three months before pregnancy to last three months of pregnancy:
    - A higher proportion of primiparas than multiparas quit smoking (48.5 percent and 38.4 percent, respectively).
    - A higher proportion of multiparas than primiparas smoked the same number of cigarettes or more (18.7 percent and 8.1 percent, respectively).

- Changes in smoking behavior from three months before pregnancy to time of survey:
    - One-fourth of primiparas and one-fifth of multiparas quit smoking (24.7 percent and 20.5 percent, respectively).
    - A higher proportion of primiparas than multiparas reduced the number of cigarettes smoked (40.6 percent and 27.6 percent, respectively).
    - A higher proportion of multiparas than primiparas smoked the same number of cigarettes or more (51.9 percent and 34.8 percent, respectively).

- Changes in smoking behavior from last three months of pregnancy to time of survey:
    - One-fifth of both primiparas and multiparas were nonsmokers (22.4 percent and 20.1 percent, respectively).
    - A higher proportion of multiparas than primiparas smoked the same number of cigarettes or more (61.0 percent and 46.1 percent, respectively).
    - A higher proportion of primiparas than multiparas were nonsmokers who started (26.4 percent and 17.8 percent, respectively).

- A higher proportion of multiparas than primiparas smoked during the last three months of pregnancy (61.6 percent and 51.5 percent, respectively).

Table 9. Among Respondents Who Were Smoking 3 Months Before Pregnancy, Gravid Status by Smoking Related Questions

Smoking related questions	Primipara		Multipara	
	%	95% CI	%	95% CI
Number of cigarettes smoked per day 3 months before pregnancy				
None	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
1 to 9	27.8	*(19.8,35.9)*	34.3	*(25.5,43.0)*
10 to 19	30.1	*(21.4,38.8)*	27.0	*(18.7,35.4)*
20 to 29	33.7	*(24.8,42.6)*	32.8	*(24.3,41.4)*
30 to 39	2.2	*(0.0,4.7)*	1.9	*(0.0,4.2)*
40 or more	6.2	*(1.4,11.0)*	4.0	*(0.4,7.5)*
TOTAL %	100.0		100.0	
During a prenatal care visit, whether health care worker talked about how smoking during pregnancy could affect the baby				
No	15.6	*(8.6,22.5)*	20.8	*(13.6,28.0)*
Yes	84.4	*(77.5,91.4)*	79.2	*(72.0,86.4)*
TOTAL %	100.0		100.0	

Smoking related questions	Primipara		Multipara	
	%	95% CI	%	95% CI
Advice given to respondents from health care worker on dangers of smoking during pregnancy				
Told me to quit	50.0	*(40.3,59.8)*	46.1	*(36.5,55.8)*
Told me to cut down	21.6	*(12.8,30.4)*	16.0	*(9.1,22.9)*
Didn't talk to me, even though I smoke	2.3	*(0.0,4.9)*	8.7	*(3.3,14.0)*
Didn't talk to me because, I don't smoke	14.8	*(8.0,21.7)*	14.9	*(8.0,21.9)*
Other	11.3	*(4.6,18.0)*	14.3	*(7.4,21.1)*
TOTAL %	100.0		100.0	
Changes in smoking behavior from 3 months before pregnancy to last 3 months of pregnancy				
Nonsmoker	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
Smoker who quit	48.5	*(39.2,57.9)*	38.4	*(29.4,47.4)*
Number of cigarettes smoked per day reduced	43.4	*(34.1,52.6)*	42.9	*(33.6,52.1)*
Number of cigarettes smoked per day same or more	8.1	*(2.5,13.7)*	18.7	*(11.9,25.6)*
Nonsmoker who started	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.0	
Changes in smoking behavior from 3 months before pregnancy to time of survey				
Nonsmoker	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
Smoker who quit	24.7	*(16.6,32.7)*	20.5	*(12.7,28.4)*
Number of cigarettes smoked per day reduced	40.6	*(31.5,49.6)*	27.6	*(19.3,36.0)*
Number of cigarettes smoked per day same or more	34.8	*(25.6,44.0)*	51.9	*(42.5,61.2)*
Nonsmoker who started	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.1		100.0	
Changes in smoking behavior from last 3 months of pregnancy to time of survey				
Nonsmoker	22.4	*(14.5,30.4)*	20.1	*(12.3,27.9)*
Smoker who quit	1.7	*(0.0,3.7)*	0.5	*(0.0,1.5)*
Number of cigarettes smoked per day reduced	3.3	*(0.8,5.8)*	0.5	*(0.0,1.5)*
Number of cigarettes smoked per day same or more	46.1	*(36.6,55.6)*	61.0	*(51.9,70.1)*
Nonsmoker who started	26.4	*(18.2,34.6)*	17.8	*(11.1,24.6)*
TOTAL %	99.9		99.9	
Whether respondent smoked last 3 months of pregnancy				
No	48.5	*(39.2,57.9)*	38.4	*(29.4,47.4)*
Yes	51.5	*(42.1,60.8)*	61.6	*(52.6,70.6)*
TOTAL %	100.0		100.0	

NOTE: Caution should be used when interpreting data in this table due to small numbers.

REFERENCE TABLE 10.

- Changes in smoking behavior from three months before pregnancy to last three months of pregnancy:
    - A higher proportion of respondents who were white than Native American quit smoking (44.5 percent and 36.7 percent, respectively). A higher proportion of respondents who were Native American reduced the number of cigarettes smoked per day than respondents who were white (54.5 percent and 41.1 percent, respectively).

- Changes in smoking behavior from three months before pregnancy to time of survey:

- Respondents who were Native American were more likely than white respondents to have reduced the number of cigarettes smoked (57.7 percent and 29.8 percent, respectively) and less likely to have quit smoking (1.9 percent and 26.1 percent, respectively).

- Changes in smoking behavior from last three months of pregnancy to time of survey:
  - Respondents who were white were more likely than respondents who were Native American to be nonsmokers (24.6 percent and 1.9 percent, respectively).
  - Proportions were slightly higher among Native American respondents than white respondents with respect to smoking the same amount of cigarettes or more (63.2 percent and 51.8 percent, respectively).

- A slightly higher proportion of Native American respondents than white respondents smoked during the last three months of pregnancy (63.3 percent and 55.5 percent, respectively).

Table 10. Among Respondents Who Were Smoking 3 Months Before Pregnancy, Race by Smoking Related Questions

Smoking related questions	White		Native American		Other	
	%	95% CI	%	95% CI	%	95% CI
Changes in smoking behavior from 3 months before pregnancy to last 3 months of pregnancy						
Nonsmoker	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*	NR	*NR*
Smoker who quit	44.5	*(37.3,51.7)*	36.7	*(21.1,52.3)*	NR	*NR*
Number of cigarettes smoked per day reduced	41.1	*(34.0,48.2)*	54.5	*(38.2,70.9)*	NR	*NR*
Number of cigarettes smoked per day same or more	14.4	*(9.3,19.5)*	8.8	*(0.3,17.4)*	NR	*NR*
Nonsmoker who started	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*	NR	*NR*
TOTAL %	100.0		100.0		NR	*NR*
Changes in smoking behavior from 3 months before pregnancy to time of survey						
Nonsmoker	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*	NR	*NR*
Smoker who quit	26.1	*(19.7,32.6)*	1.9	*(0.0,5.6)*	NR	*NR*
Number of cigarettes smoked per day reduced	29.8	*(23.5,36.1)*	57.7	*(41.0,74.4)*	NR	*NR*
Number of cigarettes smoked per day same or more	44.1	*(36.9,51.3)*	40.4	*(23.8,57.0)*	NR	*NR*
Nonsmoker who started	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*	NR	*NR*
TOTAL %	100.0		100.0		NR	
Changes in smoking behavior from last 3 months of pregnancy to time of survey						
Nonsmoker	24.6	*(18.2,31.0)*	1.9	*(0.0,5.6)*	NR	*NR*
Smoker who quit	1.3	*(0.1,2.6)*	0.0	*(0.0,0.0)*	NR	*NR*
Number of cigarettes smoked per day reduced	2.2	*(0.7,3.8)*	1.9	*(0.0,5.6)*	NR	*NR*
Number of cigarettes smoked per day same or more	51.8	*(44.5,59.1)*	63.2	*(47.3,79.1)*	NR	*NR*
Nonsmoker who started	20.0	*(14.4,25.7)*	33.0	*(17.4,48.5)*	NR	*NR*
TOTAL %	99.9		100.0		NR	
Whether respondent smoked last 3 months of pregnancy						

Smoking related questions	White		Native American		Other	
	%	95% CI	%	95% CI	%	95% CI
No	44.5	*(37.3,51.7)*	36.7	*(21.1,52.3)*	NR	*NR*
Yes	55.5	*(48.3,62.7)*	63.3	*(47.7,78.9)*	NR	*NR*
TOTAL %	100.0		100.0		NR	

NOTE: NR means not reportable due to too few responses. In addition, caution should be used when interpreting other data in this table due to small numbers.

REFERENCE TABLE 11.

- Among respondents who were smoking three months before pregnancy, factors such as mother's age, length of infant's hospital stay, infant's placement in NICU, and infant's birthweight were not influenced by whether or not the respondent smoked during the last three months of pregnancy. More data will need to be collected before conclusions can be drawn regarding whether smoking during pregnancy influences birth outcomes.

Table 11. Among Respondents Who Were Smoking 3 Months Before Pregnancy, Whether Respondent Smoked Last 3 Months of Pregnancy by Respondent and Infant Characteristics

Respondent and Infant Characteristics	No, did not smoke last 3 months of pregnancy		Yes, did smoke last 3 months of pregnancy	
	%	95% CI	%	95% CI
Mother's age				
15 to 19 years	11.5	*(4.8,18.2)*	18.4	*(11.0,25.8)*
20 to 24 years	40.4	*(30.7,50.0)*	39.0	*(30.6,47.4)*
25 to 29 years	29.8	*(20.5,39.1)*	21.6	*(14.6,28.5)*
30 to 34 years	13.6	*(6.8,20.5)*	16.5	*(9.9,23.2)*
35 years and older	4.7	*(0.6,8.8)*	4.5	*(0.7,8.3)*
TOTAL %	100.0		100.0	
Length of infant's hospital stay				
Less than 24 hours (1 day)	1.8	*(0.0,4.4)*	2.8	*(0.0,5.7)*
24-48 hours (1-2 days)	59.9	*(50.2,69.6)*	62.9	*(54.5,71.3)*
3 days	15.0	*(8.0,21.9)*	18.8	*(12.2,25.4)*
4 days	12.2	*(5.6,18.7)*	3.1	*(0.3,5.9)*
5 days	3.6	*(0.0,7.2)*	4.4	*(0.3,8.6)*
6 days or more	7.5	*(2.6,12.5)*	8.0	*(3.3,12.7)*
Baby not born in hospital	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
Baby still in hospital	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.0	
Whether baby was placed in NICU (neonatal intensive care unit)				
Baby NOT in NICU	83.4	*(76.2,90.7)*	89.3	*(83.9,94.6)*
Baby in NICU	16.6	*(9.3,23.8)*	10.7	*(5.4,16.1)*
TOTAL %	100.0		100.0	
Infant's birthweight				
Less than 1,500 grams (3 lb. 4 oz. or less)	1.1	*(0.0,3.3)*	0.5	*(0.0,1.3)*
1,500 to 2,499 grams (3 lb. 5 oz. to 5 lb. 8 oz.)	4.1	*(0.5,7.7)*	5.1	*(1.5,8.7)*
2,500 to 3,999 grams (5 lb. 9 oz. to 8 lb. 13 oz.)	80.5	*(72.8,88.2)*	87.4	*(81.9,92.9)*
4,000 grams or more (8 lb. 14 oz.)	14.3	*(7.5,21.2)*	7.0	*(2.7,11.3)*
TOTAL %	100.0		100.0	

NOTE: Caution should be used when interpreting data in this table due to small numbers.

Alcohol Use

> "Alcohol use during pregnancy is a major risk factor for poor birth outcomes, independent of other maternal health risk and behavior factors."
>
> *National Vital Statistics Reports, Births: Final Data for 2002. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, and National Vital Statistics System.*

REFERENCE TABLE 12.

- Four in five respondents indicated they drank alcohol in the last two years (81.2 percent).
- Nearly two-thirds said they drank alcohol in the three months before pregnancy (65.2 percent).
- Approximately 4 percent of respondents said they drank in the last three months of pregnancy (1.2 percent reduced the number of drinks they consumed while 2.4 percent maintained or increased the number of drinks they consumed during pregnancy).
- While one-third of all respondents were non-drinkers during their pregnancy (34.8 percent), an additional 62 percent quit drinking during that time.

Table 12. Alcohol Usage of All Respondents

Alcohol usage	%	95% CI
Whether respondent had any alcoholic drinks in the past two years		
No	18.8	*(16.3,21.3)*
Yes	81.2	*(78.7,83.7)*
TOTAL %	100.0	
Whether respondent drank in the 3 months before pregnancy		
No	34.8	*(31.7,37.9)*
Yes	65.2	*(62.1,68.3)*
TOTAL %	100.0	
Whether respondent drank in the last 3 months of pregnancy		
No	96.4	*(95.1,97.6)*
Yes	3.6	*(2.4,4.9)*
TOTAL %	100.0	
Change in respondent's drinking behavior from 3 months before pregnancy to last 3 months of pregnancy		
Nondrinker	34.8	*(31.6,37.9)*
Drinker who quit	61.6	*(58.4,64.8)*
Number of drinks reduced	1.2	*(0.5,2.0)*
Number of drinks same or more	2.4	*(1.4,3.4)*
TOTAL %	100.0	

REFERENCE TABLE 13.

- The lifestyle factor of being a drinker three months before pregnancy did not influence whether or not knowing they were pregnant was a reason for not getting prenatal care as early as wanted.
- A higher proportion of respondents who consumed alcohol three months before pregnancy than those who did not consume alcohol had discussions with a health care provider

regarding the effects of alcohol on their baby (71.3 percent and 64.0 percent, respectively). However, caution should be used when interpreting these data due to small numbers.

- Respondents who drank alcohol three months before pregnancy were more likely than non-drinkers to have been told by a health care worker to not have any alcohol during pregnancy (62.5 percent and 46.1 percent, respectively).

Table 13. Whether Respondent Used Alcohol 3 Months Before Pregnancy by Early Prenatal Care and Discussions With Health Care Provider

Alcohol related questions	Yes, alcohol use 3 months before pregnancy		No alcohol use 3 months before pregnancy	
	%	95% CI	%	95% CI
Whether "didn't know was pregnant" was a reason for not getting prenatal care as early as wanted				
"Didn't know was pregnant" was NOT a reason respondent did not get prenatal care as early as wanted	64.2	*(55.2,73.1)*	62.6	*(49.3,75.9)*
"Didn't know was pregnant" WAS a reason respondent did not get prenatal care as early as wanted	35.8	*(26.9,44.8)*	37.4	*(24.1,50.7)*
TOTAL %	100.0		100.0	
Whether health care worker discussed how drinking during pregnancy could affect the baby				
No, did NOT discuss	28.7	*(25.1,32.4)*	36.0	*(30.7,41.4)*
Yes, DID discuss	71.3	*(67.6,75.0)*	64.0	*(58.6,69.3)*
TOTAL %	100.0		100.0	
Advice given by health care worker regarding alcohol use during pregnancy				
Do not have any alcohol	62.5	*(58.6,66.5)*	46.1	*(40.5,51.7)*
Only for special events	7.4	*(5.2,9.6)*	1.0	*(0.0,2.1)*
One drink per day	1.6	*(0.6,2.6)*	0.8	*(0.0,1.9)*
Didn't say anything	21.7	*(18.4,25.1)*	32.6	*(27.3,37.9)*
Other	6.7	*(4.6,8.8)*	19.5	*(14.9,24.1)*
TOTAL %	99.9		100.0	

REFERENCE TABLE 14.

- Respondents who were Medicaid recipients were more likely than non-Medicaid recipients to:
    - Drink between one and three drinks in an average week three months before pregnancy (33.3 percent and 21.7 percent, respectively). Proportions were consistently higher among Medicaid recipients than non-Medicaid recipients with respect to four or more drinks consumed in an average week in the three months prior to pregnancy. Non-Medicaid recipients were more likely than Medicaid recipients to not drink then (21.3 percent and 13.2 percent, respectively) or to drink less than one drink per week (47.3 percent and 34.8 percent, respectively).
    - Have been told by a health care worker to not have any alcohol during pregnancy (65.9 percent and 53.6 percent, respectively).

- Binge drinking is defined as having five or more alcoholic drinks in one sitting. Thirty percent of respondents who were Medicaid recipients had between one and two binges three months before pregnancy compared to 23 percent of non-Medicaid recipients. Proportions were consistently higher among Medicaid recipients than non-Medicaid recipients with respect to three or more drinking binges. Non-Medicaid recipients were more likely than Medicaid

recipients to have not had any drinking binges in the three months before pregnancy (42.0 percent and 25.5 percent, respectively).

- An overwhelming majority of respondents who were both Medicaid and non-Medicaid recipients did not drink during the last three months of pregnancy (95.9 percent and 95.4 percent, respectively).

Table 14. Medicaid Status by Alcohol Related Topics

Alcohol related topics	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Number of drinks in an average week 3 months before pregnancy				
Didn't drink then	13.2	*(9.2,17.1)*	21.3	*(17.8,24.9)*
Less than 1 drink per week	34.8	*(28.8,40.8)*	47.3	*(42.9,51.6)*
1 to 3 drinks per week	33.3	*(26.9,39.6)*	21.7	*(18.1,25.3)*
4 to 6 drinks per week	11.4	*(6.7,16.1)*	6.0	*(3.9,8.2)*
7 to 13 drinks per week	3.7	*(1.6,5.9)*	2.6	*(1.1,4.2)*
14 or more drinks per week	3.7	*(1.7,5.7)*	1.0	*(0.2,1.8)*
TOTAL %	100.1		99.9	
Number of drinking binges 3 months before pregnancy (5 or more alcoholic drinks in one sitting)				
None	25.5	*(19.1,31.8)*	42.0	*(37.4,46.6)*
1 to 2 binges	29.6	*(23.0,36.3)*	22.8	*(18.9,26.8)*
3 to 4 binges	12.7	*(8.4,17.1)*	4.6	*(2.5,6.7)*
5 or more binges	12.8	*(7.7,17.9)*	4.3	*(2.4,6.3)*
Didn't drink then	19.4	*(13.6,25.2)*	26.3	*(22.1,30.4)*
TOTAL %	100.0		100.0	
Advice given to respondents from health care worker regarding drinking during pregnancy				
Do not have any alcohol	65.9	*(60.7,71.0)*	53.6	*(49.6,57.6)*
Only for special events	3.8	*(1.8,5.7)*	5.7	*(3.8,7.6)*
One per day	0.8	*(0.0,1.6)*	1.5	*(0.5,2.5)*
Didn't say anything	21.0	*(16.5,25.4)*	27.4	*(23.9,31.0)*
Other	8.7	*(5.7,11.6)*	11.8	*(9.2,14.4)*
TOTAL %	100.2		100.0	
Number of drinks in an average week during last 3 months of pregnancy				
Didn't drink then	95.9	*(93.8,98.1)*	95.4	*(93.4,97.3)*
Less than 1 drink per week	3.8	*(1.7,5.8)*	3.8	*(2.0,5.6)*
1 to 3 drinks per week	0.0	*(0.0,0.0)*	0.6	*(0.0,1.3)*
4 to 6 drinks per week	0.3	*(0.0,0.9)*	0.2	*(0.0,0.7)*
7 to 13 drinks per week	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
14 or more drinks per week	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

REFERENCE TABLE 15.

- Current data suggest that WIC recipients were more likely than non-WIC recipients to drink alcohol in the three months before pregnancy, however caution should be used when interpreting these data due to small numbers.

- Twenty-seven percent of respondents who were WIC recipients had between one and two drinking binges (five or more alcoholic drinks in one sitting) three months before pregnancy

compared to 23 percent of non-WIC recipients. Proportions were consistently higher among WIC recipients than non-WIC recipients with respect to three or more drinking binges.

- An overwhelming majority of respondents who were both WIC and non-WIC recipients did not drink during the last three months of pregnancy (95.7 percent and 95.4 percent, respectively).

Table 15. WIC Status by Alcohol Related Topics

Alcohol related topics	WIC		Non-WIC	
	%	95% CI	%	95% CI
Number of drinks in an average week 3 months before pregnancy*				
Didn't drink then	15.7	*(11.5,20.0)*	21.0	*(17.2,24.7)*
Less than 1 drink per week	37.4	*(31.6,43.1)*	47.5	*(42.9,52.1)*
1 to 3 drinks per week	28.0	*(22.5,33.5)*	22.9	*(19.0,26.8)*
4 to 6 drinks per week	11.4	*(7.1,15.8)*	5.5	*(3.5,7.6)*
7 to 13 drinks per week	4.6	*(2.0,7.2)*	2.0	*(0.6,3.5)*
14 or more drinks per week	2.9	*(1.3,4.6)*	1.1	*(0.2,1.9)*
TOTAL %	100.0		100.0	
Number of drinking binges 3 months before pregnancy (5 or more alcoholic drinks in one sitting)				
None	25.6	*(19.8,31.5)*	44.2	*(39.4,49.1)*
1 to 2 binges	27.2	*(21.1,33.3)*	22.8	*(18.6,26.9)*
3 to 4 binges	12.7	*(8.4,16.9)*	3.5	*(1.6,5.4)*
5 or more binges	12.1	*(7.5,16.7)*	3.8	*(1.9,5.6)*
Didn't drink then	22.5	*(16.7,28.2)*	25.7	*(21.4,30.0)*
TOTAL %	100.1		100.0	
Discussions with health care worker about drinking during pregnancy				
Do not have any alcohol	62.9	*(57.8,67.9)*	53.5	*(49.3,57.6)*
Only for special events	4.0	*(2.1,5.9)*	5.8	*(3.8,7.9)*
One per day	0.8	*(0.0,1.7)*	1.6	*(0.6,2.6)*
Didn't say anything	19.7	*(15.6,23.8)*	29.3	*(25.5,33.0)*
Other	12.6	*(9.1,16.2)*	9.9	*(7.3,12.4)*
TOTAL %	100.0		100.1	
Number of drinks in an average week during last 3 months of pregnancy				
Didn't drink then	95.7	*(93.2,98.1)*	95.4	*(93.4,97.4)*
Less than 1 drink per week	3.6	*(1.4,5.9)*	3.9	*(2.1,5.7)*
1 to 3 drinks per week	0.0	*(0.0,0.0)*	0.7	*(0.0,1.5)*
4 to 6 drinks per week	0.7	*(0.0,1.7)*	0.0	*(0.0,0.0)*
7 to 13 drinks per week	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
14 or more drinks per week	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.0	

*Current data suggest that WIC recipients were more likely than non-WIC recipients to drink alcohol in the three months before pregnancy, however caution should be used when interpreting these data due to small numbers.

REFERENCE TABLE 16.

- One in four multiparas, compared to slightly more than one in 10 primiparas, did not drink in the three months before pregnancy (23.7 percent and 13.3 percent, respectively).

- Twenty-nine percent of primiparas binge drank one or two times in the three months before pregnancy (five or more drinks in one sitting) compared to 21 percent of multiparas, however caution should be used when interpreting these data due to small numbers. Nearly twice the

proportion of multiparas as primiparas did not drink then (30.0 percent and 17.7 percent, respectively).

- Primiparas were more likely than multiparas to have been told by a health care provider to not have any alcohol during pregnancy (65.1 percent and 50.6 percent, respectively).

- An overwhelming majority of both primiparas and multiparas did not drink during the last three months of pregnancy (97.1 percent and 94.3 percent, respectively). However, it is important to note that although 6 percent of multiparas consumed some alcohol during the last three months of pregnancy, caution should be used with interpretation due to small numbers.

Table 16. Gravid Status by Alcohol Related Topics

Alcohol related topics	Primipara		Multipara	
	%	95% CI	%	95% CI
Number of drinks in an average week 3 months before pregnancy				
Didn't drink then	13.3	*(9.6,17.0)*	23.7	*(19.6,27.8)*
Less than 1 drink per week	41.9	*(36.4,47.3)*	45.9	*(41.1,50.8)*
1 to 3 drinks per week	27.8	*(22.8,32.8)*	21.7	*(17.7,25.7)*
4 to 6 drinks per week	10.9	*(7.2,14.6)*	5.0	*(2.8,7.1)*
7 to 13 drinks per week	3.2	*(1.2,5.3)*	2.7	*(1.0,4.4)*
14 or more drinks per week	2.9	*(1.3,4.6)*	1.1	*(0.4,1.8)*
TOTAL %	100.0		100.1	
Number of drinking binges 3 months before pregnancy (5 or more alcoholic drinks in one sitting)*				
None	37.7	*(31.8,43.6)*	38.7	*(33.6,43.7)*
1 to 2 binges	29.1	*(23.6,34.7)*	20.6	*(16.4,24.9)*
3 to 4 binges	7.8	*(4.6,11.0)*	5.4	*(3.1,7.7)*
5 or more binges	7.7	*(4.4,11.1)*	5.4	*(3.1,7.6)*
Didn't drink then	17.7	*(12.8,22.5)*	30.0	*(25.2,34.7)*
TOTAL %	100.0		100.1	
Discussions with health care worker about drinking during pregnancy				
Do not have any alcohol	65.1	*(60.3,70.0)*	50.6	*(46.3,54.9)*
Only for special events	5.5	*(3.2,7.7)*	5.0	*(3.1,6.9)*
One per day	1.2	*(0.1,2.3)*	1.4	*(0.4,2.4)*
Didn't say anything	18.3	*(14.4,22.1)*	31.5	*(27.5,35.5)*
Other	10.0	*(6.8,13.1)*	11.5	*(8.8,14.3)*
TOTAL %	100.1		100.0	
Number of drinks in an average week during last 3 months of pregnancy				
Didn't drink then	97.1	*(95.1,99.0)*	94.3	*(92.0,96.5)*
Less than 1 drink per week	2.9	*(1.0,4.9)*	4.5	*(2.4,6.5)*
1 to 3 drinks per week	0.0	*(0.0,0.0)*	0.8	*(0.0,1.7)*
4 to 6 drinks per week	0.0	*(0.0,0.0)*	0.5	*(0.0,1.1)*
7 to 13 drinks per week	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
14 or more drinks per week	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
TOTAL %	100.0		100.1	

*Current data suggest that multiparas were more likely than primiparas to drink alcohol in the three months before pregnancy, however caution should be used when interpreting these data due to small numbers.

Weight Gain

> "Both excessive and insufficient maternal weight gain during pregnancy influence pregnancy outcomes. Inadequate maternal weight gain has been associated with an increased risk of intrauterine growth retardation, shortened period of gestation, low birthweight, and perinatal mortality. High weight gain during pregnancy has been linked with an elevated risk of a large-for-age infant, cesarean delivery, and long-term maternal weight retention."
>
> *National Vital Statistics Reports, Births: Final Data for 2002. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, and National Vital Statistics System.*

REFERENCE TABLE 17.

- The average height of respondents was 65.4 inches or 5 feet, 5 inches (data not shown). The average weight of respondents was 152 pounds (data not shown).

- Based on calculations of Body Mass Index (BMI), 31 percent of respondents were either overweight or obese. Fourteen percent were underweight.

Table 17. Body Mass Index (BMI)* of Respondent

BMI	%	95% CI
Underweight (BMI < 19.8)	13.8	*(11.5,16.1)*
Normal (BMI = 19.8 to 26.00)	55.2	*(51.9,58.5)*
Overweight (BMI = 26.01 to 29.0)	10.7	*(8.7,12.8)*
Obese (BMI > 29.0)	20.3	*(17.7,22.8)*
TOTAL %	100.0	

*Based on the Institute of Medicine guidelines as reported in National Vital Statistics Reports, Births: Final Data for 2000. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, and National Vital Statistics System.

REFERENCE TABLES 18-20.

- A higher proportion of non-Medicaid recipients had BMI's within the normal range compared to Medicaid recipients (58.5 percent and 45.9 percent, respectively). Respondents who were Medicaid recipients were more likely than non-Medicaid recipients to be obese (26.3 percent and 18.1 percent, respectively).

- Forty-seven percent of respondents who were WIC recipients had BMIs within the normal range compared to 60 percent of non-WIC recipients. Respondents who were WIC recipients were more likely to be obese than non-WIC recipients (27.4 percent and 16.4 percent, respectively).

- A higher proportion of primiparas than multiparas had BMIs within the normal range (60.0 percent and 52.0 percent, respectively). A smaller proportion of primiparas than multiparas were obese (16.7 percent and 22.9 percent, respectively).

Table 18. Medicaid Status by Body Mass Index (BMI) of Respondent

BMI	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Underweight (BMI < 19.8)	17.4	*(13.1,21.7)*	12.4	*(9.7,15.1)*
Normal (BMI = 19.8 to 26.00)	45.9	*(40.2,51.5)*	58.5	*(54.6,62.5)*
Overweight (BMI = 26.01 to 29.0)	10.4	*(7.1,13.8)*	10.9	*(8.4,13.5)*
Obese (BMI > 29.0)	26.3	*(21.4,31.3)*	18.1	*(15.1,21.2)*
TOTAL %	100.0		99.9	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 19. WIC Status by Body Mass Index (BMI) of Respondent

BMI	WIC		Non-WIC	
	%	95% CI	%	95% CI
Underweight (BMI < 19.8)	14.7	*(11.0,18.5)*	13.2	*(10.3,16.1)*
Normal (BMI = 19.8 to 26.00)	46.5	*(41.2,51.9)*	59.8	*(55.7,63.9)*
Overweight (BMI = 26.01 to 29.0)	11.3	*(7.8,14.9)*	10.5	*(8.0,13.1)*
Obese (BMI > 29.0)	27.4	*(22.8,32.1)*	16.4	*(13.3,19.5)*
TOTAL %	99.9		99.9	

Table 20. Gravid Status by Body Mass Index (BMI) of Respondent

BMI	Primipara		Multipara	
	%	95% CI	%	95% CI
Underweight (BMI < 19.8)	14.9	*(11.2,18.6)*	12.6	*(9.8,15.5)*
Normal (BMI = 19.8 to 26.00)	60.0	*(55.0,64.9)*	52.0	*(47.7,56.3)*
Overweight (BMI = 26.01 to 29.0)	8.5	*(5.6,11.4)*	12.5	*(9.6,15.4)*
Obese (BMI > 29.0)	16.7	*(13.1,20.3)*	22.9	*(19.3,26.5)*
TOTAL %	100.1		100.0	

REFERENCE TABLE 21.

Table 21 represents the Institute of Medicine's guidelines for recommended weight gain for singleton (not a multiple birth) pregnancies based on pre-pregnancy Body Mass Index (BMI). Pre-pregnancy BMI is categorized into underweight, normal, overweight, and obese.

Table 21. Recommended Weight Gain During Pregnancy Based on Pre-Pregnancy Body Mass Index (BMI)

Pre-pregnancy BMI	Recommended total weight gain (in pounds) for singleton pregnancies*
Underweight (BMI < 19.8)	28 to 40
Normal (BMI = 19.8 to 26.00)	25 to 35
Overweight (BMI = 26.01 to 29.0)	15 to 25
Obese (BMI > 29.0)	15 to 25

*Institute of Medicine guidelines as published by the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists. Guidelines for Perinatal Care, Fifth Edition, October 2002.

Diet-Related Problems During Pregnancy

REFERENCE TABLE 22.

- While one-fifth of those who did not experience high blood pressure were obese, approximately one-third of those who did experience high blood pressure were obese (19.1 percent and 36.3 percent, respectively).

Table 22. Whether Respondent Experienced High Blood Pressure During Pregnancy by Body Mass Index (BMI)

BMI	Experienced high blood pressure		Did not experience high blood pressure	
	%	95% CI	%	95% CI
Underweight (BMI < 19.8)	3.8	*(0.0,8.6)*	14.6	*(12.2,17.0)*
Normal (BMI = 19.8 to 26.00)	48.7	*(35.9,61.5)*	55.7	*(52.4,59.1)*
Overweight (BMI = 26.01 to 29.0)	11.3	*(3.6,18.9)*	10.6	*(8.5,12.8)*
Obese (BMI > 29.0)	36.3	*(24.2,48.4)*	19.1	*(16.5,21.7)*
TOTAL %	100.1		100.0	

REFERENCE TABLE 23.

- One-fourth of respondents who were Medicaid recipients and one-fifth of respondents who were non-Medicaid recipients experienced high blood pressure during pregnancy (24.3 percent and 18.5 percent, respectively).

- Medicaid status was not a factor in whether or not respondents experienced high blood sugar or diabetes during pregnancy.

- Medicaid recipients were more likely than non-Medicaid recipients to have experienced severe nausea during pregnancy (30.6 percent and 19.5 percent, respectively).

Table 23. Medicaid Status by Whether Respondent Experienced Complications of High Blood Pressure, High Blood Sugar (Diabetes), or Severe Nausea During Pregnancy

Complications	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Experienced high blood pressure				
No	75.7	*(71.2,80.2)*	81.5	*(78.4,84.5)*
Yes	24.3	*(19.8,28.8)*	18.5	*(15.5,21.6)*
TOTAL %	100.0		100.0	
Experienced high blood sugar (diabetes)				
No	92.8	*(89.9,95.6)*	93.8	*(91.9,95.7)*
Yes	7.3	*(4.4,10.1)*	6.2	*(4.3,8.1)*
TOTAL %	100.1		100.0	
Experienced severe nausea				
No	69.4	*(64.4,74.5)*	80.5	*(77.3,83.6)*
Yes	30.6	*(25.5,35.7)*	19.5	*(16.4,22.7)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

REFERENCE TABLE 24.

- Approximately one-fifth of WIC recipients and non-WIC recipients experienced high blood pressure during pregnancy (22.2 percent and 18.8 percent, respectively).
- WIC status was not a factor in whether or not respondents experienced high blood sugar or diabetes during pregnancy.
- Twenty-seven percent of WIC recipients and 20 percent of non-WIC recipients experienced severe nausea during pregnancy.

Table 24. WIC Status by Whether Respondent Experienced Complications of High Blood Pressure, High Blood Sugar (Diabetes), or Severe Nausea During Pregnancy

Complications	WIC		Non-WIC	
	%	95% CI	%	95% CI
Experienced high blood pressure				
No	77.8	*(73.7,81.9)*	81.2	*(78.0,84.4)*
Yes	22.2	*(18.1,26.3)*	18.8	*(15.6,22.0)*
TOTAL %	100.0		100.0	
Experienced high blood sugar (diabetes)				
No	93.2	*(90.7,95.6)*	93.5	*(91.5,95.6)*
Yes	6.8	*(4.4,9.3)*	6.5	*(4.4,8.5)*
TOTAL %	100.0		100.0	
Experienced severe nausea				
No	72.7	*(68.1,77.2)*	80.0	*(76.6,83.3)*
Yes	27.4	*(22.8,31.9)*	20.1	*(16.7,23.4)*
TOTAL %	100.1		100.1	

REFERENCE TABLE 25.

- Primiparas were more likely than multiparas to have experienced high blood pressure during pregnancy (24.5 percent and 16.9 percent, respectively).
- Gravid status was not a factor in whether or not respondents experienced high blood sugar or diabetes during pregnancy.
- Gravid status was not a factor in whether or not respondents experienced severe nausea during pregnancy.

Table 25. Gravid Status by Whether Respondent Experienced Complications of High Blood Pressure, High Blood Sugar (Diabetes), or Severe Nausea During Pregnancy

Complications	Primipara		Multipara	
	%	95% CI	%	95% CI
Experienced high blood pressure				
No	75.5	*(71.3,79.8)*	83.1	*(80.0,86.2)*
Yes	24.5	*(20.3,28.7)*	16.9	*(13.8,20.0)*
TOTAL %	100.0		100.0	
Experienced high blood sugar (diabetes)				
No	93.2	*(90.9,95.6)*	93.3	*(91.2,95.5)*
Yes	6.8	*(4.4,9.1)*	6.7	*(4.5,8.8)*
TOTAL %	100.1		100.0	
Experienced severe nausea				
No	76.1	*(71.9,80.2)*	78.6	*(75.2,82.1)*
Yes	23.9	*(19.8,28.1)*	21.4	*(17.9,24.9)*
TOTAL %	100.0		100.0	

Vitamin Use, Exercise, and Immunizations

REFERENCE TABLE 26.

- A vast majority of respondents had either had chickenpox (varicella) or had been vaccinated for it (92.4 percent) (data not shown).

- Respondents who were Medicaid recipients were half as likely than non-Medicaid recipients to have taken a multivitamin every day in the month before pregnancy (16.5 percent and 38.4 percent, respectively). Two-thirds of Medicaid recipients, compared to 38 percent of non-Medicaid recipients, said they did not take a multivitamin before pregnancy.

- Medicaid status was not a factor in whether or not respondents engaged in physical activity during pregnancy.

Table 26. Medicaid Status by Multivitamin Use in Month Before Pregnancy and Physical Activity During Pregnancy

Multivitamin use and physical activity	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Number of times per week a multivitamin was taken in month before pregnancy				
Didn't take a multivitamin	66.1	*(60.8,71.3)*	38.1	*(34.3,42.0)*
1 to 3 times per week	12.7	*(9.0,16.3)*	11.7	*(9.2,14.3)*
4 to 6 times per week	4.8	*(2.3,7.3)*	11.8	*(9.2,14.3)*
Every day	16.5	*(12.3,20.7)*	38.4	*(34.6,42.2)*
TOTAL %	100.1		100.0	
Physical activity during pregnancy				
Very little exercise (watch TV, read)	24.2	*(19.3,29.0)*	23.9	*(20.5,27.3)*
Sporadic exercise (walking once or twice a week, volleyball or bowling once a week)	49.4	*(43.9,54.9)*	48.0	*(44.1,52.0)*
Moderate exercise (regular walking, swimming, etc., for about 30 minutes a day or 20 minutes of vigorous exercise at least three times a week)	26.0	*(21.3,30.6)*	27.3	*(23.7,30.8)*
Vigorous exercise (jog several miles a day, aerobics several times a week)	0.5	*(0.0,1.4)*	0.8	*(0.1,1.5)*
TOTAL %	100.1		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

REFERENCE TABLE 27.

- Respondents who were WIC recipients were half as likely as non-WIC recipients to have taken a multivitamin every day in the month before pregnancy (20.1 percent and 39.0 percent, respectively). Sixty percent of WIC recipients and 38 percent of non-WIC recipients said they did not take a multivitamin before pregnancy.

- WIC status was not a factor in whether or not respondents engaged in physical activity during pregnancy.

Table 27. WIC Status by Multivitamin Use in Month Before Pregnancy and Physical Activity During Pregnancy

Multivitamin use and physical activity	WIC		Non-WIC	
	%	95% CI	%	95% CI
Number of times per week a multivitamin was taken in month before pregnancy				
Didn't take a multivitamin	60.4	*(55.3,65.5)*	38.2	*(34.1,42.2)*
1 to 3 times per week	13.3	*(9.8,16.9)*	11.0	*(8.5,13.5)*

Multivitamin use and physical activity	WIC		Non-WIC	
	%	95% CI	%	95% CI
4 to 6 times per week	6.2	*(3.5,8.8)*	11.9	*(9.2,14.6)*
Every day	20.1	*(16.0,24.3)*	39.0	*(35.0,43.0)*
TOTAL %	100.0		100.1	
Physical activity during pregnancy				
Very little exercise (watch TV, read)	23.3	*(18.9,27.7)*	24.4	*(20.8,28.0)*
Sporadic exercise (walking once or twice a week, volleyball or bowling once a week)	49.8	*(44.5,55.0)*	47.5	*(43.4,51.7)*
Moderate exercise (regular walking, swimming, etc., for about 30 minutes a day or 20 minutes of vigorous exercise at least three times a week)	26.0	*(21.6,30.4)*	27.5	*(23.8,31.2)*
Vigorous exercise (jog several miles a day, aerobics several times a week)	0.9	*(0.0,1.9)*	0.6	*(0.0,1.3)*
TOTAL %	100.0		100.0	

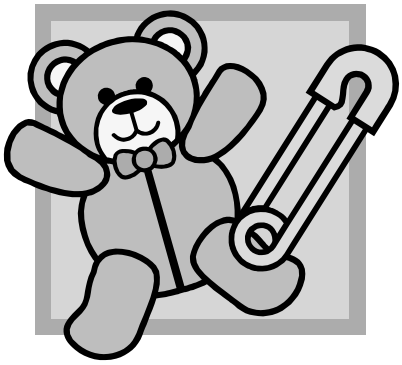
REFERENCE TABLE 28.

- About one-third of both primiparas and multiparas said they had taken a multivitamin every day in the month before pregnancy (33.8 percent and 30.7 percent, respectively). Nearly one-half each of primiparas and multiparas indicated that before pregnancy, they did not take a multivitamin (47.2 percent and 45.3 percent, respectively).

- Gravid status was not a factor in whether or not respondents engaged in physical activity during pregnancy.

Table 28. Gravid Status by Multivitamin Use in Month Before Pregnancy and Physical Activity During Pregnancy

Multivitamin use and physical activity	Primipara		Multipara	
	%	95% CI	%	95% CI
Number of times per week a multivitamin was taken in month before pregnancy				
Didn't take a multivitamin	47.2	*(42.2,52.2)*	45.3	*(41.2,49.5)*
1 to 3 times per week	10.9	*(8.0,13.9)*	12.9	*(10.0,15.8)*
4 to 6 times per week	8.1	*(5.3,10.9)*	11.1	*(8.4,13.8)*
Every day	33.8	*(29.2,38.5)*	30.7	*(26.8,34.6)*
TOTAL %	100.0		100.0	
Physical activity during pregnancy				
Very little exercise (watch TV, read)	22.7	*(18.5,26.9)*	25.1	*(21.3,28.8)*
Sporadic exercise (walking once or twice a week, volleyball or bowling once a week)	47.6	*(42.5,52.6)*	49.3	*(45.1,53.6)*
Moderate exercise (regular walking, swimming, etc., for about 30 minutes a day or 20 minutes of vigorous exercise at least three times a week)	29.5	*(25.0,34.0)*	24.8	*(21.2,28.4)*
Vigorous exercise (jog several miles a day, aerobics several times a week)	0.3	*(0.0,0.8)*	0.8	*(0.1,1.6)*
TOTAL %	100.1		100.0	



Prenatal Stress and Complications

What moms had to say:

"I think doctors or nurses or whoever should help other pregnant women understand and deal with post-partum blues, cause I'm am still struggling with it. The one thing I knew about it was want friends told. No doctors told what to do if I got them. I still have episodes when all I want to do is scream and cry and there's no reason I can think of, why I'm crying, or whatever. I also think that they should have more programs that will help assist single mothers with bills and stuff like that. In N.D. I couldn't get TANF unless my boyfriend moved out and there was no way we could have survived on just one paycheck, so he had to move. I thought it was ridiculous and wrong."

"I'm interested in info pertaining to stress during pregnancy. My husband is in the military and left for the Middle East 5 days after Sept. 11; therefore, he was gone for most of the last 4 months of my pregnancy and had to leave again 2 wks after my son was born. My son was born healthy. However, I have read studies on the effects of stress/traumatic events and would provide any assistance if research on this issue following 9/11."

"To all pregnant mothers or women with other small children. DO NOT take any physical or mental abuse from spouse or partner. You don't deserve it. I know it's easier said than done, but you have to protect yourself and your babies! It took me a long time to realize I was being abused. He never hurt my baby, but he did hurt me. It sucked, but I made him leave and I moved on with my life. Now I'm successful and I can enjoy life and my precious little baby boy! You CAN do it! Good luck!"

"I would like to say … please tell mothers never to smoke, drink, do drugs when pregnant. Also have them to be checked for preeclamsia early so they can be treated for it. Because I lost a baby due to preeclamisa, toxemia, because the doctor I went to thought there was really nothing there. I had it so severe that I could have died myself. So please have them be check for it early. Thank you. P.S. Also always have them be checked for diabetes too. That will also cause preeclamsia."

"My education is high school graduate, B.S. in Elem/Sp. Ed. Law Degree (JD). I think it would be great, even though health care providers assume I would have all info because of my large family, if more time was taken to educate. Wish there was more info on aftercare-what's normal and what's not normal. Post-partum depression-not enough info on that. I think that happens more often than we think. I had very good doctors, but think that's why some are going to midwifes-Doctor's are so busy. Mental Health issues and aftercare. H.C. providers should not skip over the questions because they assume the mom's know about it (e.g. questions on survey where we ask if health care provider talked w/them about various issues). Would be happy to be an advocate of any of the issues-esp. the mental health issues.

"My baby was born by c-section (planned) because my gestational diabetes was getting hard to control. I breast fed my first baby f or 16 mos. so nobody had to teach me the second time. Perhaps you should have included some questions about mother's mental state while pregnant & after the birth. In hindsight, I think I was probably moderately depressed during the last 3 mos. of pregnancy, though it may have just been the high levels of stress from dealing with gestational diabetes. (Since baby was born, I haven't felt any depression).

"I developed gestational diabetes w/ this baby. I didn't have it with my first baby. I had to do insulin shots twice a day for the last 3+ months of pregnancy. Baby and I are both ok and I no longer have to take shots. I was really scared for my baby and myself at first because I didn't know how common this was. The support from co-workers who had also experienced gest. diabetes was so helpful. Not everyone has that opportunity w/ many co-workers. There should be more info. out about this condition."

Stressful Events

"Stress during pregnancy can result in premature and low birthweight babies. Pregnancy can be a difficult time, especially for low income women."

1999 North Dakota New Mothers' Survey

REFERENCE TABLE 1.

- Overall, 72 percent of respondents experienced at least one stressful event 12 months before their baby's birth. Forty-three percent said they experienced one or two stressful events, 22 percent experienced three to five stressful events, and 6 percent experienced anywhere from six to 13 stressful events in the 12 months prior to their baby's birth (data not shown).

- Respondents indicated the top four stresses they experienced in the 12 months before their baby was born were: they moved to a new address (36.3 percent), they argued with their husband or partner more than usual (26.2 percent), a family member was ill or became hospitalized (25.5 percent), and they had lots of bills they could not pay (23.7 percent).

Table 1. Whether Respondents Experienced Various Stressful Events 12 Months Before Baby's Birth

Stressful events	Yes, experienced event		No, did not experience event		TOTAL %
	%	95% CI	%	95% CI	
Moved to a new address	36.3	*(33.3,39.4)*	63.7	*(60.6,66.7)*	100.0
Argued with husband or partner more than usual	26.2	*(23.4,28.9)*	73.8	*(71.1,76.6)*	100.0
Family member ill or hospitalized	25.5	*(22.8,28.3)*	74.5	*(71.7,77.2)*	100.0
Lots of bills that couldn't be paid	23.7	*(21.1,26.2)*	76.3	*(73.8,78.9)*	100.0
Someone close died	17.5	*(15.1,19.9)*	82.5	*(80.1,84.9)*	100.0
Someone close had a bad problem with drugs/alcohol	15.0	*(12.7,17.2)*	85.0	*(82.8,87.3)*	100.0
Husband or partner lost job	10.5	*(8.6,12.5)*	89.5	*(87.5,91.4)*	100.0
Husband or partner didn't want pregnancy	8.2	*(6.4,9.9)*	91.9	*(90.1,93.6)*	100.1
Got separated or divorced	7.6	*(6.0,9.3)*	92.4	*(90.7,94.0)*	100.0
Mom lost job	6.5	*(4.9,8.0)*	93.6	*(92.0,95.1)*	100.1
Husband or partner went to jail	4.2	*(3.1,5.3)*	95.8	*(94.7,96.9)*	100.0
Mom was in a physical fight	3.4	*(2.4,4.4)*	96.6	*(95.6,97.6)*	100.0
Mom was homeless	1.7	*(1.0,2.3)*	98.3	*(97.7,99.0)*	100.0

REFERENCE TABLES 2-7.

- Respondents who were Medicaid recipients were more likely to experience a greater number of stressful events than non-Medicaid recipients. Approximately 40 percent of Medicaid recipients said they experienced between three and five stressful events in the year prior to their baby's birth, while 17 percent said they experienced between six and 13 stressful events. Among non-Medicaid recipients, 15 percent said they experienced between three and five stressful events, while 2 percent said they experienced six to 13 stressful events.

- Respondents who were WIC recipients were also more likely to experience a greater number of stressful events than respondents who were not WIC recipients. One-third of WIC recipients said they experienced between three and five stresses, while 14 percent said they experienced between six and 13 stressful events in the 12 months prior to their baby's birth. Among non-WIC respondents, 16 percent said they experienced between three and five stressful events, while 2 percent said they experienced six to 13 stressful events.

- Proportions were similar among primiparas and multiparas regarding the number of stressful events they experienced 12 months before their baby was born. Three-fourths of primiparas indicated they experienced at least one stressful event, while 69 percent of multiparas said they experienced at least one stressful event.

- Among whites, 29 percent said they had experienced no stressful events, while 45 percent said they had experienced one or two stressful events in the 12 months prior to their baby's birth. The majority of Native American respondents experienced at least three stressful events (58.6 percent). However, caution should be used when interpreting data regarding stressful events among Native American respondents due to small numbers. Data about mothers of other races are not reportable because of too few numbers.

- Respondents who were not married were more likely to experience a greater number of stressful events than married respondents. Nine percent of unmarried respondents reported having no stressful events, while 52 percent said they had experienced at least three stressful events in the 12 months before their baby was born. In contrast, among married respondents, 34 percent said they had experienced no stressful events while percent said they had experienced at least three stressful events in the 12 months prior to their baby's birth.

- Younger respondents were more likely than older respondents to experience a greater number of stressful events. One-third of respondents who were 15 to 19 years old (34.1 percent), and one-fourth of respondents who were between 20 to 24 years of age (28.9 percent), said they had experienced between three and five stressful events in the 12 months before they delivered their baby. Among 25 to 29 and 30 to 34 year olds, one-fifth had experienced three to five stressful events in the 12 months prior to their baby's birth (18.3 percent and 17.2 percent, respectively).

Table 2. Medicaid Status by Number of Stressful Events Experienced 12 Months Before Baby's Birth

Number of stressful events	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
None	9.6	*(6.4,12.9)*	35.5	*(31.8,39.3)*
1 to 2	33.4	*(28.1,38.6)*	47.0	*(43.0,50.9)*
3 to 5	40.1	*(34.7,45.5)*	15.3	*(12.5,18.1)*
6 to 13	16.9	*(13.0,20.9)*	2.2	*(0.9,3.5)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 3. WIC Status by Number of Stressful Events Experienced 12 Months Before Baby's Birth

Number of stressful events	WIC		Non-WIC	
	%	95% CI	%	95% CI
None	16.6	*(12.7,20.5)*	35.1	*(31.2,39.1)*
1 to 2	36.5	*(31.4,41.6)*	46.7	*(42.6,50.8)*
3 to 5	33.2	*(28.4,38.0)*	16.2	*(13.2,19.1)*
6 to 13	13.7	*(10.4,17.0)*	2.0	*(0.8,3.2)*
TOTAL %	100.0		100.0	

Table 4. Gravid Status by Number of Stressful Events Experienced 12 Months Before Baby's Birth

Number of stressful events	Primipara		Multipara	
	%	95% CI	%	95% CI
None	25.3	*(21.0,29.7)*	30.7	*(26.8,34.6)*
1 to 2	44.4	*(39.4,49.4)*	42.5	*(38.3,46.6)*
3 to 5	23.7	*(19.5,27.8)*	20.9	*(17.6,24.2)*
6 to 13	6.6	*(4.3,8.9)*	6.0	*(4.2,7.8)*
TOTAL %	100.0		100.1	

Table 5. Mother's Race by Number of Stressful Events Experienced 12 Months Before Baby's Birth

Number of stressful events	White		Native American*		Other	
	%	95% CI	%	95% CI	%	95% CI
None	29.2	*(26.1,32.3)*	13.5	*(5.2,21.8)*	NR	*NR*
1 to 2	44.7	*(41.4,48.1)*	27.9	*(16.6,39.1)*	NR	*NR*
3 to 5	21.3	*(18.6,24.0)*	35.3	*(24.5,46.2)*	NR	*NR*
6 to 13	4.8	*(3.4,6.2)*	23.3	*(14.7,31.9)*	NR	*NR*
TOTAL %	100.0		100.0		NR	

NOTE: NR means not reportable due to small numbers.
*Caution should be used when interpreting data regarding stressful events among Native American respondents due to small numbers.

Table 6. Marital Status by Number of Stressful Events Experienced 12 Months Before Baby's Birth

Number of stressful events	Married		Not married	
	%	95% CI	%	95% CI
None	34.4	*(30.8,37.9)*	9.4	*(5.7,13.1)*
1 to 2	44.5	*(40.8,48.2)*	38.7	*(32.1,45.3)*
3 to 5	18.8	*(16.0,21.6)*	33.3	*(27.1,39.5)*
6 to 13	2.4	*(1.3,3.5)*	18.6	*(13.8,23.4)*
TOTAL %	100.1		100.0	

Table 7. Mother's Age by Number of Stressful Events Experienced 12 Months Before Baby's Birth

Number of stressful events	Age 15 to 19		Age 20 to 24		Age 25 to 29		Age 30 to 34		Age 35 and older	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
None	9.1	*(2.8,15.5)*	19.8	*(14.7,24.9)*	32.2	*(26.9,37.5)*	35.2	*(28.8,41.6)*	38.1	*(28.2,47.9)*
1 to 2	39.9	*(26.9,53.0)*	42.9	*(36.9,48.8)*	44.5	*(38.8,50.2)*	43.5	*(36.9,50.1)*	41.0	*(31.0,51.0)*
3 to 5	34.1	*(22.0,46.3)*	28.9	*(23.6,34.1)*	18.3	*(14.0,22.5)*	17.2	*(12.4,22.1)*	20.3	*(12.3,28.2)*
6 to 13	16.8	*(7.7,25.9)*	8.5	*(5.5,11.4)*	5.0	*(2.7,7.4)*	4.1	*(1.8,6.5)*	0.7	*(0.0,1.9)*
TOTAL %	99.9		100.1		100.0		100.0		100.1	

"Undernutrition and overnutrition can affect the number and type of cells, insulin and glucose use, endocrine changes and redistribution of blood flow. Infants born too small or too large are at greater risk of becoming obese and of developing a variety of chronic diseases."

1999 North Dakota New Mothers' Survey

"Low birthweight (LBW) and especially very low birthweight (VLBW) are major predictors of infant morbidity and mortality. For VLBW infants (less than 1,500 grams), the risk of dying in the first year of life is nearly 100 times that of normal birthweight infants; the risk for moderately LBW infants (1,500-2,499 grams) is more than five times higher. LBW, especially VLBW, infants who do survive are more likely to suffer long-term disabilities."

National Vital Statistics Reports, Births: Final Data for 2002. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, and National Vital Statistics System.

REFERENCE TABLES 8-10.

- The average infant birthweight was 3,421 grams (data not shown).
- Five percent of all respondents delivered low birthweight babies (i.e., 1,500 to 2,500 grams or 3 lb. 5 oz. to 5 lb. 9 oz.). Less than one-half percent were very low birthweight (i.e., less than 1,500 grams or 3 lb. 5 oz.).
- Four in five respondents (82.2 percent) delivered babies whose birthweight was between 2,500 and 3,999 grams (5 lb. 9 oz. and 8 lb. 13 oz.).
- Forty-three percent of respondents who delivered infants weighing 2,500 grams or more said they experienced one or two stressful events in the 12 months before their baby was born. Twenty-three percent said they experienced three to five stressful events. Unfortunately, conclusions cannot be made at this time regarding the data about babies weighing 2,499 grams or less due to small numbers.
- Overall, 11 percent of respondents said their infants were placed in NICU (neonatal intensive care unit) after birth (data not shown). More than two-thirds of respondents whose babies were placed in NICU experienced at least one stressful event in the 12 months before their babies were born (70.0 percent), while one-third experienced at least three stressful events (30.6 percent).

Table 8. Infant's Birthweight

Infant's birthweight	%	95% CI
Less than 1,500 grams (3 lb. 4 oz. or less) – "very low"	0.4	*(0.0,0.7)*
1,500 to 2,499 grams (3 lb. 5 oz. to 5 lb. 8 oz.) – "moderately low"	4.5	*(3.1,5.9)*
2,500 to 3,999 grams (5 lb. 9 oz. to 8 lb. 13 oz.)	82.2	*(79.7,84.6)*
4,000 grams or more (8 lb. 14 oz. or more) – "macrosomic"	13.0	*(10.8,15.1)*
TOTAL %	100.1	

Note: "Very low", "moderately low", and "macrosomic" birthweights, defined by National Vital Statistics Reports, Births: Final Data for 2002. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, and National Vital Statistics System.

Table 9. Infant Birthweight by Number of Stressful Events Experienced in 12 Months Before Baby's Birth

Number of stressful events	2,499 grams (5 lb. 8 oz.) or less		2,500 grams (5 lb. 9 oz.) or more	
	%	95% CI	%	95% CI
None	28.5	*(14.5,42.6)*	28.5	*(25.5,31.4)*
1 to 2	50.6	*(35.2,66.1)*	42.7	*(39.5,46.0)*
3 to 5	17.0	*(5.8,28.2)*	22.5	*(19.8,25.1)*
6 to 13	3.8	*(0.0,9.0)*	6.3	*(4.9,7.8)*
TOTAL %	99.9		100.0	

Note: Conclusions cannot be made at this time regarding the data among babies weighing 2,499 grams or less due to small numbers.

Table 10. Number of Stressful Events Experienced in 12 Months Before Baby's Birth by NICU Placement

Number of stressful events	Yes, NICU placement		No, no NICU placement	
	%	95% CI	%	95% CI
None	30.0	*(21.0,39.0)*	28.3	*(25.2,31.4)*
1 to 2	39.5	*(30.0,48.9)*	43.6	*(40.2,46.9)*
3 to 5	21.7	*(13.8,29.6)*	22.3	*(19.6,25.1)*
6 to 13	8.9	*(4.2,13.6)*	5.8	*(4.4,7.3)*
TOTAL %	100.1		100.0	

Physical Abuse

REFERENCE TABLE 11.

- Despite an overwhelming majority of respondents who said they did not experience physical abuse 12 months before becoming pregnant or during their pregnancy, physical abuse did occur.

- In the 12 months before becoming pregnant, 3.4 percent of respondents said they were abused by their husband or partner and 2.5 percent said they were abused by someone else.

- Physical abuse also occurred during the pregnancy. Three percent of respondents said they were abused by their husband or partner and 1.0 percent said they were abused by someone else.

Table 11. Whether Respondent Experienced Physical Abuse by Husband/Partner or Anyone Else in 12 Months Before Becoming Pregnant or During Pregnancy

Physical abuse	12 months before becoming pregnant		During pregnancy	
	%	95% CI	%	95% CI
Abuse by husband or partner				
No	96.6	*(95.6,97.6)*	97.5	*(96.6,98.3)*
Yes	3.4	*(2.4,4.4)*	2.6	*(1.7,3.4)*
TOTAL %	100.0		100.1	
Abuse by anyone else				
No	97.6	*(96.6,98.5)*	99.0	*(98.3,99.6)*
Yes	2.5	*(1.5,3.4)*	1.0	*(0.4,1.7)*
TOTAL %	100.1		100.0	

REFERENCE TABLE 12.

- The prevalence of physical abuse in the 12 months prior to becoming pregnant was:
  - Higher among Medicaid recipients than non-Medicaid recipients (12.1 percent and 2.8 percent, respectively).
  - Higher among WIC recipients than non-WIC recipients (9.8 percent and 2.9 percent, respectively).
  - Similar among primiparas and multiparas (6.9 percent and 4.1 percent, respectively).

Table 12. Medicaid, WIC, and Gravid Status by Whether Respondent Experienced Abuse in 12 Months Before Becoming Pregnant

Status	Yes, experienced abuse before becoming pregnant		No, did not experience abuse before becoming pregnant		TOTAL %
	%	95% CI	%	95% CI	
Medicaid status					
Medicaid*	12.1	*(8.9,15.3)*	87.9	*(84.7,91.1)*	100.0
Non-Medicaid	2.8	*(1.5,4.1)*	97.2	*(95.9,98.5)*	100.0
WIC status					
WIC	9.8	*(7.0,12.6)*	90.2	*(87.4,93.0)*	100.0
Non-WIC	2.9	*(1.6,4.1)*	97.1	*(95.9,98.4)*	100.0
Gravid status					
Primipara	6.9	*(4.5,9.2)*	93.2	*(90.8,95.5)*	100.1
Multipara	4.1	*(2.8,5.5)*	95.9	*(94.5,97.3)*	100.0

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

REFERENCE TABLE 13.

- The prevalence of physical abuse during pregnancy was:
  - Higher among Medicaid recipients than non-Medicaid recipients (7.4 percent and 1.9 percent, respectively).
  - Higher among WIC recipients than non-WIC recipients (6.8 percent and 1.6 percent, respectively).
  - Similar among primiparas and multiparas (4.4 percent and 2.8 percent, respectively).

Table 13. Medicaid, WIC, and Gravid Status by Whether Respondent Experienced Abuse During Pregnancy

Status	Yes, experienced abuse during pregnancy		No, did not experience abuse during pregnancy		TOTAL %
	%	95% CI	%	95% CI	
Medicaid status					
Medicaid*	7.4	*(4.9,9.9)*	92.6	*(90.1,95.1)*	100.0
Non-Medicaid	1.9	*(0.7,3.2)*	98.1	*(96.8,99.3)*	100.0
WIC status					
WIC	6.8	*(4.3,9.3)*	93.2	*(90.7,95.8)*	100.0
Non-WIC	1.6	*(0.7,2.6)*	98.4	*(97.4,99.4)*	100.0
Gravid status					
Primipara	4.4	*(2.4,6.3)*	95.6	*(93.7,97.6)*	100.0
Multipara	2.8	*(1.5,4.1)*	97.2	*(95.9,98.5)*	100.0

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

REFERENCE TABLE 14.

- Overall, 24 percent of respondents said a doctor, nurse, or other health care worker talked with them about physical abuse to women by their husbands or partners during their prenatal care visits (data not shown). The prevalence of discussions about physical abuse by health care workers was:
    - Higher among Medicaid recipients than non-Medicaid recipients (36.9 percent and 19.5 percent, respectively).
    - Higher among WIC recipients than non-WIC recipients (35.0 percent and 18.3 percent, respectively).
    - Similar among primiparas and multiparas (27.2 percent and 22.3 percent, respectively).

Table 14. Medicaid, WIC, and Gravid Status by Whether Health Care Worker Discussed Issues of Physical Abuse

Status	No, health care worker did not discuss issues of physical abuse		Yes, health care worker discussed issues of physical abuse		TOTAL %
	%	95% CI	%	95% CI	
Medicaid status					
Medicaid*	63.1	*(57.9,68.3)*	36.9	*(31.7,42.2)*	100.0
Non-Medicaid	80.5	*(77.3,83.7)*	19.5	*(16.4,22.7)*	100.0
WIC status					
WIC	65.1	*(60.2,70.0)*	35.0	*(30.1,39.9)*	100.1
Non-WIC	81.7	*(78.5,84.9)*	18.3	*(15.1,21.5)*	100.0
Gravid status					
Primipara	72.8	*(68.4,77.2)*	27.2	*(22.8,31.6)*	100.0
Multipara	77.7	*(74.2,81.2)*	22.3	*(18.8,25.8)*	100.0

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Complications of Pregnancy

REFERENCE TABLE 15.

- Overall, the three most common complications respondents experienced during their pregnancy were: preterm or early labor (26.6 percent); severe nausea, vomiting, or dehydration (22.7 percent); and high blood pressure or edema (20.0 percent). Seven percent of respondents indicated they had high blood sugar or diabetes, a condition that can result in increased congenital anomalies (*1999 North Dakota New Mothers' Survey*).

- Of respondents who indicated they had experienced complications during their pregnancy, 47 percent said they went to the hospital because of their complications, and 23 percent were on bed rest for more than two days because of a doctor's advice (data not shown).

Table 15. Whether Respondent Experienced Complications During Pregnancy

Complications	Yes, experienced complication		No, did not experience complication		TOTAL %
	%	95% CI	%	95% CI	
Preterm labor (labor pains more than 3 weeks before baby was due)	26.6	*(23.7,29.4)*	73.4	*(70.6,76.3)*	100.0
Severe nausea, vomiting, or dehydration	22.7	*(20.0,25.3)*	77.3	*(74.7,80.0)*	100.0
High blood pressure or edema (retained water)	20.0	*(17.5,22.5)*	80.0	*(77.5,82.5)*	100.0
Kidney or bladder infection	16.1	*(13.7,18.4)*	83.9	*(81.6,86.3)*	100.0

Complications	Yes, experienced complication		No, did not experience complication		TOTAL %
	%	95% CI	%	95% CI	
Vaginal bleeding	13.9	*(11.7,16.1)*	86.1	*(83.9,88.3)*	100.0
High blood sugar or diabetes	6.7	*(5.1,8.3)*	93.3	*(91.7,94.9)*	100.0
PROM [premature rupture of membranes (water broke more than 3 weeks before baby was due)]	5.6	*(4.0,7.1)*	94.4	*(92.9,96.0)*	100.1
Problems with the placenta	4.0	*(2.8,5.1)*	96.0	*(94.9,97.2)*	100.0
Incompetent cervix (cervix had to be sewn shut)	1.1	*(0.5,1.7)*	98.9	*(98.3,99.5)*	100.0
Car crash injury (respondent was hurt in a car accident)	0.5	*(0.1,0.9)*	99.5	*(99.1,99.9)*	100.1

REFERENCE TABLE 16.

- Of respondents who had:
  - Kidney or bladder infection, 40 percent said they experienced one or two stressful events, and 27 percent experienced three to five stressful events.
  - Preterm labor complications, 38 percent said they experienced one or two stressful events, and 31 percent said they experienced three to five stresses in the 12 months prior to delivering their baby.
  - Severe nausea, vomiting, or dehydration, 37 percent said they had one or two stressful events, and 30 percent had three to five stressful events.
  - Premature rupture of their membranes (PROM), 35 percent said they experienced one or two stressful events, and 31 percent said they experienced three to five stressful events.
  - High blood pressure, 33 percent said they experienced one or two stressful events, and 29 percent said they experienced three to five stressful events.
  - Vaginal bleeding, 31 percent experienced one to two stressful events, and 31 percent experienced three to five stressful events.
  - Problems with the placenta, 25 percent said they experienced one to two stressful events, and 33 percent experienced three to five stressful events.

- One-third of respondents who experienced PROM had no stressful events (31.7 percent). One in five respondents who experienced kidney or bladder infections and preterm labor had no stressful events (19.7 percent and 22.0 percent, respectively).

Table 16. Among Respondents Who Said They Experienced Complications, Total Number of Stressful Events Experienced Twelve Months Prior to Delivery

Complications	None		1 to 2 stressful events		3 to 5 stressful events		6 to 13 stressful events		TOTAL%
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Preterm labor	22.0	*(16.6,27.3)*	37.7	*(31.4,44.0)*	31.2	*(25.3,37.0)*	9.2	*(5.9,12.5)*	100.1
Severe nausea, vomiting or dehydration	25.8	*(19.9,31.7)*	37.3	*(30.8,43.8)*	29.5	*(23.6,35.5)*	7.4	*(4.4,10.3)*	100.0
High blood pressure or edema	25.4	*(19.2,31.6)*	33.4	*(26.8,40.1)*	28.8	*(22.6,34.9)*	12.4	*(7.9,16.9)*	100.0
Kidney or bladder infection	19.7	*(13.3,26.2)*	39.9	*(31.8,48.0)*	27.3	*(20.2,34.3)*	13.1	*(7.9,18.4)*	100.0
Vaginal bleeding	25.3	*(17.7,32.8)*	31.0	*(23.2,38.9)*	30.6	*(22.7,38.5)*	13.1	*(7.5,18.8)*	100.0
High blood	24.8	*(14.2,35.5)*	33.8	*(22.3,45.4)*	29.6	*(18.1,41.1)*	11.8	*(5.0,18.5)*	100.0

Complications	None		1 to 2 stressful events		3 to 5 stressful events		6 to 13 stressful events		TOTAL%
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
sugar or diabetes									
PROM	31.7	*(18.0,45.4)*	35.2	*(21.3,49.0)*	30.8	*(17.2,44.3)*	2.4	*(0.0,6.6)*	100.1
Problems with the placenta	28.0	*(14.1,41.9)*	24.8	*(11.7,37.8)*	32.7	*(18.7,46.6)*	14.6	*(4.1,25.1)*	100.1
Incompetent cervix	NR	*NR*	NR	*NR*	NR	*NR*	NR	*NR*	NR
Car crash injury	NR	*NR*	NR	*NR*	NR	*NR*	NR	*NR*	NR

NOTE: NR means not reportable due to too few responses.

REFERENCE TABLE 17.

- Of respondents who smoked during the last three months of pregnancy:
  - One-third experienced preterm labor.
  - One-fourth experienced severe nausea, vomiting, or dehydration.
  - Approximately one-fifth experienced kidney or bladder infection (22.2 percent).
  - Approximately one-fifth experienced high blood pressure or edema (18.8 percent).

- The prevalence of preterm labor was higher among respondents who smoked during the last three months of pregnancy than those who did not smoke (33.6 percent and 25.1 percent, respectively) (data for non-users are not shown).

- The prevalence of kidney or bladder infection was higher among respondents who smoked during the last three months of pregnancy than those who did not smoke (22.2 percent and 15.0 percent, respectively) (data for non-users are not shown).

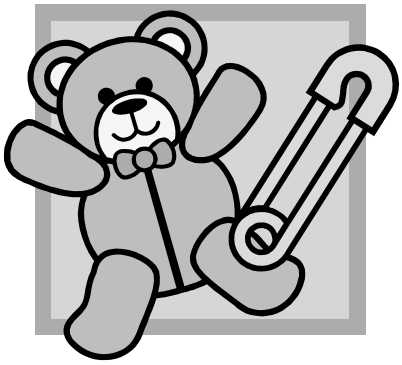
Table 17. Among Respondents Who Smoked During Last 3 Months of Pregnancy, Whether Respondent Experienced Complications

Complications	Yes, experienced complication		No, did not experience complication		TOTAL %
	%	95% CI	%	95% CI	
Preterm labor (labor pains more than 3 weeks before baby was due)	33.6	*(26.0,41.2)*	66.4	*(58.8,74.0)*	100.0
Severe nausea, vomiting, or dehydration	25.3	*(18.5,32.0)*	74.7	*(68.0,81.5)*	100.0
High blood pressure or edema (retained water)	18.8	*(12.6,25.1)*	81.2	*(74.9,87.4)*	100.0
Kidney or bladder infection	22.2	*(15.2,29.2)*	77.8	*(70.8,84.8)*	100.0
Vaginal bleeding	14.8	*(9.2,20.4)*	85.2	*(79.6,90.8)*	100.0
High blood sugar or diabetes	6.3	*(2.6,10.0)*	93.7	*(90.0,97.4)*	100.0
PROM [premature rupture of membranes (water broke more than 3 weeks before baby was due)]	4.2	*(1.2,7.2)*	95.8	*(92.8,98.8)*	100.0
Problems with the placenta	5.6	*(1.9,9.3)*	94.4	*(90.7,98.1)*	100.0
Incompetent cervix (cervix had to be sewn shut)	2.6	*(0.4,4.8)*	97.4	*(95.3,99.6)*	100.0
Car crash injury (respondent was hurt in a car accident)	0.4	*(0.0,1.2)*	99.6	*(98.8,100.0)*	100.0

NOTE: Caution should be used when interpreting data in this table due to small numbers.

Other Issues

- Although there were some respondents who indicated they drank alcohol during the last three months of their pregnancy, more data will need to be gathered before conclusions can be made regarding the prevalence of alcohol consumption and pregnancy complications among North Dakota mothers.



Infant Health Characteristics and Services

What moms had to say:

"After I had my baby - the nurses would constantly wake him up for me to feed him they would take his cap off and rub his head even after I said that he will wake up when he's hungry. It was very frustrating. Also, I asked the nurse to NOT to give him a pacifier and she didn't, but when the new shift of nurses came she gave him one. It would have been nice if that sort of info. could have been on his bassinet so they would all know."

"My son was born with a broken left clavicle. Afterward, I found out of more babies born with similar problems from the same OB doctor. Something should be done about this!"

"I was very upset that the hospital gave my baby formula even though they new I was planning on breastfeeding. I was also upset that they kept taking my daughter out of my room at night and giving her a bottle even though I told them I didn't want them to. I wasn't pleased with them doing this at all."

"My baby was born with Spina Bifida. Doctors always warn you about iron, but this too should be enforced. I never knew nothing about folic acid. Please do something to teach women before they try to get pregnant. Thank you."

"As a new mother of a daughter and my first child, I would like to say that, while my stay in the hospital I was treated very well and my Dr. checked in to see me several times. My baby was born with a heart mummer and the Dr. checked her over and explained to me that he would run some tests and do an x-ray. I was scared for my baby's life but it turned out that it was nothing to be worried about, it went away by the 2nd day so she was able to go home with me."

"I am a mother with Addison's Disease and I had more than the normal hospital visits and health issues. I had to watch my life style very closely in the way I ate to how I exercised but in the end with all the work, and staying away from drinking and all the stuff one does when not being pregnant, it was well worth it, she is beautiful."

"This was a twin pregnancy-resulting in an early delivery. The babies were in the NICU 12 days."

"I had a miscarriage 2 months before this pregnancy. My baby was born at 29 weeks and spent 55 days in the NICU at St. Alexius. H e is still on oxygen. He weighed 3 lbs 2 oz at birth and now weighs 9 lbs 15.9 oz."

"My baby has multiple problems from birth. He spent 6 wk. in the hospital. He is fed through a g-tube. I was not seen 3 wk. prior to having him because of my ob having scheduling problems. It was like I wasn't monitored very good just because my other babies were born w/ no problems. I think doctors should treat all pregnancies like it was their first."

Infant Health Characteristics

REFERENCE TABLE 1.

- Based on birth certificate data, 37 percent of infants weighed between 3,000 and 3,499 grams and 32 percent weighed between 3,500 and 3,999 grams. Five percent of infants were born weighing less than 2,500 grams.
- Infant gender was nearly equal as 51 percent of births were female and 49 percent were male (data not shown).
- Eleven percent of respondents indicated their infants were placed in NICU (neonatal intensive care unit) after birth.
- Sixty-two percent said their infant stayed in the hospital between one and two days after birth and 7 percent said their infant stayed in the hospital for at least six days.

Table 1. Infant Profile

Infant characteristics	%	95% CI
Infant's birthweight		
Less than 500 grams (1 lb. 1 oz. or less)	0.0	*(0.0,0.0)*
500 to 999 grams (1 lb. 2 oz. to 2 lb. 3 oz.)	0.1	*(0.0,0.3)*
1,000 to 1,499 grams (2 lb. 4 oz. to 3 lb. 4 oz.)	0.3	*(0.0,0.5)*
1,500 to 1,999 grams (3 lb. 5 oz. to 4 lb. 6 oz.)	0.6	*(0.0,1.1)*
2,000 to 2,499 grams (4 lb. 7 oz. to 5 lb. 8 oz.)	3.9	*(2.6,5.3)*
2,500 to 2,999 grams (5 lb. 9 oz. to 6 lb. 9 oz.)	13.7	*(11.4,15.9)*
3,000 to 3,499 grams (6 lb. 10 oz. to 7 lb. 11 oz.)	36.9	*(33.8,40.0)*
3,500 to 3,999 grams (7 lb. 12 oz. to 8 lb. 13 oz.)	31.6	*(28.6,34.6)*
4,000 to 4,499 grams (8 lb. 14 oz. to 9 lb. 14 oz.)	11.0	*(9.0,13.0)*
4,500 to 4,999 grams (9 lb. 15 oz. to 11 lb. 0 oz.)	2.0	*(1.2,2.9)*
5,000 grams or more (11 lb. 1 oz. or more)	0.0	*(0.0,0.0)*
TOTAL %	100.1	
Whether infant was placed in NICU (neonatal intensive care unit)		
No	88.8	*(86.8,90.9)*
Yes	11.2	*(9.1,13.2)*
TOTAL %	100.0	
Length of infant's hospital stay		
Less than 24 hours (1 day)	2.1	*(1.2,3.0)*
24 to 48 hours (1-2 days)	62.4	*(59.3,65.5)*
3 days	19.6	*(17.1,22.2)*
4 days	7.5	*(5.8,9.2)*
5 days	1.6	*(0.8,2.5)*
6 days or more	6.5	*(4.9,8.1)*
Baby not born in hospital	0.3	*(0.0,0.6)*
Baby still in hospital	0.0	*(0.0,0.0)*
TOTAL %	100.0	

REFERENCE TABLES 2-4.

- The vast majority of infants weighed at least 2,500 grams at birth. Medicaid status and WIC status were not factors in birthweight.

- Approximately one in ten respondents said their infant was placed in NICU (neonatal intensive care unit) after birth. Medicaid status and WIC status were not factors in NICU placement.

- Although the vast majority of both primiparas and multiparas delivered infants weighing 2,500 grams or more, primiparas were more likely than multiparas to have delivered a low birthweight infant weighing 2,499 grams or less (7.9 percent and 2.6 percent, respectively).

- Infants born to primiparas were more likely to have been placed in NICU (neonatal intensive care unit) after birth than infants born to multiparas (14.8 percent and 8.5 percent, respectively).

Table 2. Medicaid Status by Infant Health Characteristics

Infant characteristics	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Infant's birthweight				
Low birthweight (less than 2,500 grams)	5.5	*(2.8,8.1)*	4.7	*(2.9,6.5)*
Not low birthweight (2,500 grams or more)	94.5	*(91.9,97.2)*	95.3	*(93.5,97.1)*
TOTAL %	100.0		100.0	
Whether infant was placed in NICU (neonatal intensive care unit)				
No	86.9	*(83.1,90.7)*	89.9	*(87.5,92.3)*
Yes	13.1	*(9.4,16.9)*	10.1	*(7.8,12.5)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 3. WIC Status by Infant Health Characteristics

Infant characteristics	WIC		Non-WIC	
	%	95% CI	%	95% CI
Infant's birthweight				
Low birthweight (less than 2,500 grams)	4.4	*(2.5,6.3)*	5.2	*(3.1,7.2)*
Not low birthweight (2,500 grams or more)	95.6	*(93.7,97.5)*	94.8	*(92.8,96.9)*
TOTAL %	100.0		100.0	
Whether infant was placed in NICU (neonatal intensive care unit)				
No	89.5	*(86.6,92.5)*	88.8	*(86.1,91.4)*
Yes	10.5	*(7.5,13.4)*	11.3	*(8.6,13.9)*
TOTAL %	100.0		100.1	

Table 4. Gravid Status by Infant Health Characteristics

Infant characteristics	Primipara		Multipara	
	%	95% CI	%	95% CI
Infant's birthweight				
Low birthweight (less than 2,500 grams)	7.9	*(5.0,10.9)*	2.6	*(1.3,3.9)*
Not low birthweight (2,500 grams or more)	92.1	*(89.1,95.0)*	97.4	*(96.1,98.7)*
TOTAL %	100.0		100.0	
Whether infant was placed in NICU (neonatal intensive care unit)				
No	85.2	*(81.6,88.8)*	91.5	*(89.2,93.8)*
Yes	14.8	*(11.2,18.5)*	8.5	*(6.2,10.8)*
TOTAL %	100.0		100.0	

REFERENCE TABLE 5.

- Table 5 illustrates the recommended (i.e., adequate) weight gain during pregnancy, based on a respondent's pre-pregnancy Body Mass Index (BMI) as recommended by the Institute of Medicine (IOM). While IOM defined only adequate weight gain, inadequate weight gain is determined to be below the IOM recommended range and excessive weight gain to be above the recommended range.

Table 5. Guidelines for Weight Gain During Pregnancy [Based on Pre-Pregnancy Body Mass Index (BMI)] as Recommended by the Institute of Medicine

Pre-pregnancy BMI	Inadequate weight gain (in pounds)	Adequate weight gain (in pounds)*	Excessive weight gain (in pounds)
Underweight (BMI <19.8)	0 to 27	28 to 40	41 or more
Normal (BMI = 19.8 to 26.00)	0 to 24	25 to 35	36 or more
Overweight (BMI = 26.01 to 29.0)	0 to 14	15 to 25	26 or more
Obese (BMI > 29.0)	0 to 14	15 to 25	26 or more

* Recommended total weight gain for singleton pregnancies from Institute of Medicine guidelines as published by the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists. Guidelines for Perinatal Care, Fifth Edition, October 2002. Inadequate weight gain was determined to be below the IOM recommended range and excessive weight gain was determined to be above the IOM recommended range.

REFERENCE TABLE 6.

- Overall, 5 percent of infants were born at a low birthweight (2,499 grams or less) (data not shown).

- Underweight respondents:
    - Fourteen percent of all respondents were underweight prior to becoming pregnant (data not shown).
    - Twenty percent of underweight respondents who gained an inadequate amount of weight during pregnancy gave birth to low birthweight babies (2,499 grams or less). In contrast, 2 percent of underweight respondents who gained an adequate amount of weight gave birth to low birthweight babies. However, caution should be used when interpreting these data due to small numbers. Unfortunately, data regarding underweight mothers who had excessive weight are not reportable due to too few responses.

- Normal weight respondents:
    - Fifty-five percent of all respondents were of normal weight prior to their pregnancy (data not shown).
    - Nine percent of normal weight respondents who gained an inadequate amount of weight during pregnancy gave birth to low birthweight babies (2,499 grams or

less). In contrast, 3 percent of normal weight respondents who gained the recommended amount of weight gave birth to low birthweight babies.

- Overweight respondents:
  - Eleven percent of all respondents were overweight prior to their pregnancy (data not shown).
  - Eight percent of overweight respondents who gained an excessive amount of weight during pregnancy gave birth to low birthweight babies (2,499 grams or less). Unfortunately, conclusions cannot be made at this time regarding data about overweight mothers who had inadequate and adequate weight gains due to too few responses.

- Obese respondents:
  - Twenty percent of all respondents were obese prior to their becoming pregnant (data not shown).
  - Eight percent of obese respondents who gained an inadequate amount of weight during pregnancy gave birth to low birthweight babies (2,499 grams or less). Two percent of obese respondents who gained an excessive amount of weight gave birth to low birthweight infants.

Table 6. Of Respondents Who Were Underweight, Normal Weight, Overweight, or Obese, Adequacy of Weight Gain by Infant Birthweight

Infant birthweight by weight status of mother	Adequacy of weight gain					
	Inadequate weight gain		Adequate weight gain		Excessive weight gain	
	%	95% CI	%	95% CI	%	95% CI
Mother was underweight (BMI < 19.8)*						
Low infant birthweight (2,499 grams or less)	19.7	*(5.1,34.3)*	2.0	*(0.0,5.7)*	NR	*NR*
Not low infant birthweight (2,500 grams or more)	80.3	*(65.7,94.9)*	98.0	*(94.4,100.0)*	NR	*NR*
TOTAL %	100.0		100.0		NR	
Mother was normal weight (BMI = 19.8 to 26.00)						
Low infant birthweight (2,499 grams or less)	8.5	*(2.7,14.3)*	2.5	*(0.0,5.0)*	3.3	*(0.8,5.8)*
Not low infant birthweight (2,500 grams or more)	91.5	*(85.7,97.3)*	97.5	*(95.0,100.0)*	96.7	*(94.2,99.2)*
TOTAL %	100.0		100.0		100.0	
Mother was overweight (BMI = 26.01 to 29.0)						
Low infant birthweight (2,499 grams or less)	NR	*NR*	NR	*NR*	8.3	*(0.4,16.1)*
Not low infant birthweight (2,500 grams or more)	NR	*NR*	NR	*NR*	91.8	*(83.9,99.6)*
TOTAL %	NR		NR		100.1	
Mother was obese (BMI > 29.0)						
Low infant birthweight (2,499 grams or less)	7.8	*(0.0,16.0)*	5.2	*(0.3,10.0)*	2.3	*(0.0,5.4)*
Not low infant birthweight (2,500 grams or more)	92.2	*(84.0,100.0)*	94.8	*(90.0,99.7)*	97.7	*(94.7,100.0)*
TOTAL %	100.0		100.0		100.0	

NOTE: NR means not reportable due to too few responses.
*Caution should be used when interpreting data of underweight respondents who gained an inadequate amount of weight due to small numbers.

REFERENCE TABLE 7.

- Whether an infant was or was not placed in NICU (neonatal intensive care unit) after birth did not vary greatly by the age of respondent.

- Although only 7 percent of respondents gave birth to a moderately pre-term infant (32 to 36 weeks) (data not shown), 43 percent of infants who were placed in NICU (neonatal intensive care unit) were moderately pre-term.

- Of all respondents, less than one percent gave birth to a very pre-term infant (less than 32 weeks) (data not shown). Of infants who were placed in NICU (neonatal intensive care unit) after birth, slightly more than 2 percent were very pre-term.

Table 7. NICU Placement by Age of Respondent and Gestational Age of Infant

Age	NICU placement		Non-NICU placement	
	%	95% CI	%	95% CI
Mother's age				
15 to 19 years of age	10.4	*(3.7,17.0)*	8.1	*(6.0,10.2)*
20 to 24 years of age	22.5	*(14.9,30.1)*	26.2	*(23.3,29.1)*
25 to 29 years of age	36.5	*(27.3,45.6)*	31.6	*(28.4,34.8)*
30 to 34 years of age	21.6	*(13.5,29.8)*	24.2	*(21.3,27.1)*
35 years and older	9.1	*(3.6,14.5)*	9.9	*(7.9,12.0)*
TOTAL %	100.1		100.0	
Gestational age of infant				
Very pre-term (< 32 weeks)	2.4	*(0.0,5.1)*	0.1	*(0.0,0.4)*
Moderately pre-term (32 to 36 weeks)	43.0	*(33.3,52.6)*	2.6	*(1.5,3.7)*
Full-term (37 weeks or more)	54.6	*(45.0,64.3)*	97.3	*(96.1,98.4)*
TOTAL %	100.0		100.0	

Infant Health Services

REFERENCE TABLE 8.

- More than one-third of respondents said their infants were not seen by a health care provider in the first week after leaving the hospital (38.3 percent). Of those infants who were seen by a health care provider in the first week, three-fourths were seen at a doctor's office, clinic, or other health care facility (75.7 percent).

- An overwhelming majority of respondents said their infants had at least one well-baby checkup. Fifty-eight percent stated their infants had one or two well-baby visits and 38 percent had three or more visits. Most well-baby visits took place at the hospital clinic (71.1 percent).

Table 8. Infant Health Services

Infant health services	%	95% CI
Whether infant was seen by a health care provider in the first week after leaving the hospital		
No	38.3	*(35.2,41.5)*
Yes	61.7	*(58.5,64.8)*
TOTAL %	100.0	
Location of visit for infants who were seen by a health care provider within the first week of leaving the hospital		
At home	24.4	*(20.7,28.0)*
At doctor's office, clinic, or other health care facility	75.7	*(72.0,79.3)*

Infant health services	%	95% CI
TOTAL %	100.1	
Whether infant had a well-baby checkup		
No	3.5	*(2.2,4.7)*
Yes	96.5	*(95.3,97.8)*
TOTAL %	100.0	
Number of well-baby checkups		
No visits	3.6	*(2.3,4.9)*
1 to 2 visits	58.4	*(55.1,61.6)*
3 or more visits	38.1	*(34.9,41.3)*
TOTAL %	100.1	
Location of well-baby checkups		
Hospital clinic	71.1	*(68.0,74.2)*
Health department clinic	6.6	*(5.0,8.3)*
Private doctor's office or HMO clinic	20.0	*(17.2,22.7)*
Indian Health Service	0.2	*(0.0,0.5)*
Other	2.2	*(1.2,3.1)*
TOTAL %	100.1	

REFERENCE TABLE 9.

- Among respondents whose infant had no well-baby check-ups (at the time of the survey):
    - Similar proportions existed between respondents whose delivery was paid by Medicaid and those whose delivery was paid by Blue Cross/Blue Shield (41.1 percent and 36.6 percent, respectively). Fifteen percent of respondents said their delivery was paid for privately. Caution should be used when interpreting these data due to small numbers.

- Among respondents whose infant had one or two well-baby check-ups at the time of the survey:
    - The source of payment was more likely to be Blue Cross/Blue Shield than any other form of payment. One-fifth said their delivery was paid for by Medicaid (20.8 percent). Very few said their delivery was paid for privately (2.8 percent).

- Among respondents whose infant had three or more well-baby check-ups at the time of the survey:
    - The source of payment was more likely to be Blue Cross/Blue Shield than any other form of payment. One-fifth said their delivery was paid for by Medicaid (20.8 percent). Very few said their delivery was paid for privately (1.4 percent).

Table 9. Number of Well-Baby Checkups (at Time of Survey) by Source of Payment for Delivery

	No visits**		1 to 2 visits		3 or more visits	
Source of payment for delivery*	%	95% CI	%	95% CI	%	95% CI
Blue Cross/Blue Shield	36.6	*(17.9,55.3)*	50.6	*(46.4,54.8)*	57.6	*(52.6,62.5)*
Other private insurance	7.1	*(0.0,16.2)*	15.9	*(12.6,19.2)*	12.9	*(9.3,16.5)*
Medicaid	41.1	*(24.2,58.0)*	20.8	*(18.8,22.9)*	20.8	*(17.8,23.8)*
Other government insurance	0.0	*(0.0,0.0)*	9.9	*(7.2,12.6)*	7.3	*(4.1,10.5)*
Private pay	15.1	*(0.0,30.3)*	2.8	*(1.2,4.3)*	1.4	*(0.1,2.7)*
TOTAL %	99.9		100.0		100.0	

*Source of payment for delivery based on birth certificate data.
**Caution should be used when interpreting data regarding "no visits" due to small numbers.

REFERENCE TABLE 10.

- While a majority of both Medicaid and non-Medicaid recipients whose infant was seen by a health care provider within the first week of leaving the hospital said their infants were seen at a doctor's office, clinic, or other health care facility, non-Medicaid recipients were more likely than Medicaid recipients to have had their infant seen by a health care provider at home (27.6 percent and 17.3 percent, respectively).

- At least two-thirds of both Medicaid and non-Medicaid recipients utilized a hospital clinic for their well-baby checkups (66.8 percent and 73.1 percent, respectively), and one-fifth in each group utilized a private doctor's office or HMO clinic. However, Medicaid recipients were more likely than non-Medicaid recipients to utilize health department clinics for well-baby checkups (11.8 percent and 4.4 percent, respectively).

Table 10. Medicaid Status by Infant Health Services

Infant health services	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Location of visit for infants who were seen by a health care provider within the first week of leaving the hospital				
At home	17.3	*(11.7,22.9)*	27.6	*(22.9,32.2)*
At doctor's office, clinic, or other health care facility	82.7	*(77.1,88.3)*	72.4	*(67.8,77.1)*
TOTAL %	100.0		100.0	
Location of well-baby checkups				
Hospital clinic	66.8	*(61.1,72.5)*	73.1	*(69.4,76.8)*
Health department clinic	11.8	*(8.2,15.4)*	4.4	*(2.7,6.0)*
Private doctor's office/HMO clinic	19.6	*(14.7,24.5)*	20.2	*(16.9,23.6)*
Indian Health Service	1.8	*(0.3,3.3)*	2.1	*(0.9,3.3)*
Other	0.0	*(0.0,0.0)*	0.2	*(0.0,0.6)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

REFERENCE TABLE 11.

- For respondents whose infants were seen by a health care provider within the first week of leaving the hospital, WIC recipients were more likely than non-WIC recipients to have their infants visit a doctor's office, clinic, or other health care facility (82.4 percent and 71.8 percent, respectively). Non-WIC recipients were more likely than WIC recipients to have had their infants seen by a health care provider at home (28.2 percent and 17.6 percent, respectively).

- Approximately two-thirds of WIC and non-WIC recipients said they utilized a hospital clinic for their well-baby checkups (65.7 percent and 73.7 percent, respectively), and about one-fifth in each group utilized a private doctor's office or HMO clinic (18.4 percent and 21.0 percent, respectively). However, WIC recipients were more likely than non-WIC recipients to utilize health department clinics for well-baby checkups (10.9 percent and 4.4 percent, respectively).

Table 11. WIC Status by Infant Health Services

Infant health services	WIC		Non-WIC	
	%	95% CI	%	95% CI
Location of visit for infants who were seen by a health care provider within the first week of leaving the hospital				
At home	17.6	*(12.4,22.8)*	28.2	*(23.3,33.1)*

Infant health services	WIC		Non-WIC	
	%	95% CI	%	95% CI
At doctor's office, clinic, or other health care facility	82.4	*(77.2,87.6)*	71.8	*(66.9,76.7)*
TOTAL %	100.0		100.0	
Location of well-baby checkups				
Hospital clinic	65.7	*(60.3,71.0)*	73.7	*(69.9,77.5)*
Health department clinic	10.9	*(7.6,14.3)*	4.4	*(2.7,6.2)*
Private doctor's office/HMO clinic	18.4	*(14.0,22.9)*	21.0	*(17.5,24.5)*
Indian Health Service	4.6	*(2.3,6.9)*	0.9	*(0.0,1.8)*
Other	0.5	*(0.0,1.3)*	0.0	*(0.0,0.0)*
TOTAL %	100.1		100.0	

REFERENCE TABLE 12.

- Similar proportions existed among primiparas and multiparas with respect to location of visits for infants who saw a health care provider within the first week of leaving the hospital. Approximately three-fourths of respondents within each group said their infant went to a doctor's office, clinic, or other health care facility (72.2 percent and 78.4 percent, respectively).

- Primiparas were more likely than multiparas to utilize a hospital clinic for well-baby checkups (76.0 percent and 67.4 percent, respectively). Multiparas were more likely than primiparas to utilize a private doctor's office or HMO clinic (24.7 percent and 13.7 percent, respectively).

Table 12. Gravid Status by Infant Health Services

Infant health services	Primipara		Multipara	
	%	95% CI	%	95% CI
Location of visit for infants who were seen by a health care provider within the first week of leaving the hospital				
At home	27.8	*(22.3,33.3)*	21.6	*(16.8,26.4)*
At doctor's office, clinic, or other health care facility	72.2	*(66.7,77.7)*	78.4	*(73.6,83.3)*
TOTAL %	100.0		100.0	
Location of well-baby checkups				
Hospital clinic	76.0	*(71.6,80.4)*	67.4	*(63.2,71.7)*
Health department clinic	8.8	*(5.9,11.6)*	5.0	*(3.1,6.9)*
Private doctor's office/HMO clinic	13.7	*(10.0,17.3)*	24.7	*(20.8,28.7)*
Indian Health Service	1.6	*(0.4,2.8)*	2.6	*(1.1,4.1)*
Other	0.0	*(0.0,0.0)*	0.3	*(0.0,0.8)*
TOTAL %	100.1		100.0	

Infant's Home Environment

REFERENCE TABLE 13.

- Three-fourths of respondents said they laid their infant on his or her back to sleep (76.8 percent). Twelve percent said they laid their infant down on his or her side.

- One-fifth of respondents indicated their infant sometimes sleeps with them or someone else (22.3 percent), and one-tenth said their infant almost always sleeps with them. One-third of respondents said their infant never sleeps with anyone else (33.6 percent).

- Eleven percent of respondents said their infant was exposed to secondhand smoke; these infants were exposed, on average, 1.8 hours per day (data not shown).

Table 13. Infant Sleeping Conditions

Infant sleeping conditions	%	95% CI
Infant's sleeping position		
On side	12.2	*(10.1,14.3)*
On back	76.8	*(74.1,79.5)*
On stomach	9.4	*(7.4,11.3)*
On side and back	1.4	*(0.7,2.2)*
On side and stomach	0.1	*(0.0,0.4)*
On back and stomach	0.0	*(0.0,0.0)*
All 3 positions	0.1	*(0.0,0.2)*
TOTAL%	100.0	
The extent to which infant sleeps with mother or anyone else		
Always	5.0	*(3.5,6.5)*
Almost always	10.2	*(8.2,12.1)*
Sometimes	22.3	*(19.6,24.9)*
Rarely	28.9	*(25.9,31.9)*
Never	33.6	*(30.6,36.7)*
TOTAL %		

REFERENCE TABLE 14.

- Proportions were similar between Medicaid recipients and non-Medicaid recipients with respect to infant sleeping positions. A majority of respondents in each group laid their infant on his or her back to sleep (73.1 percent and 78.0 percent, respectively). However, Medicaid recipients were more likely than non-Medicaid recipients to lay their infant on his or her side (16.6 percent and 10.6 percent, respectively).

- A majority of both Medicaid and non-Medicaid recipients said their infant had slept in the same bed with them or someone else (74.8 percent and 63.4 percent, respectively). However, infants of non-Medicaid recipients were more likely than Medicaid recipients to never sleep with anyone else (36.6 percent and 25.2 percent, respectively).

Table 14. Medicaid by Infant Sleeping Conditions

Infant sleeping conditions	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Infant's sleeping position				
On side	16.6	*(12.8,20.4)*	10.6	*(8.1,13.1)*
On back	73.1	*(68.4,77.9)*	78.0	*(74.7,81.3)*
On stomach	8.6	*(5.3,11.8)*	9.8	*(7.4,12.2)*
On side and back	1.5	*(0.2,2.7)*	1.4	*(0.5,2.4)*
On side and stomach	0.0	*(0.0,0.0)*	0.2	*(0.0,0.5)*
On back and stomach	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
All 3 positions	0.3	*(0.0,0.7)*	0.0	*(0.0,0.0)*
TOTAL%	100.1		100.0	
The extent to which infant sleeps with mother or anyone else				
Always	8.8	*(5.5,12.2)*	3.4	*(1.8,5.0)*
Almost always	13.0	*(9.1,16.8)*	9.0	*(6.7,11.3)*
Sometimes	23.8	*(19.2,28.4)*	22.1	*(18.8,25.3)*
Rarely	29.3	*(24.1,34.4)*	29.0	*(25.3,32.6)*
Never	25.2	*(20.4,29.9)*	36.6	*(32.8,40.4)*
TOTAL %	100.1		100.1	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

REFERENCE TABLE 15.

- Proportions were similar between WIC recipients and non-WIC recipients with respect to infant sleeping positions. Most WIC and non-WIC recipients said they laid their infant on his or her back to sleep (73.2 percent and 79.1 percent, respectively). However, about one-tenth in each group said they laid their infant on his or her side (13.8 percent and 11.0 percent, respectively), and about one-tenth in each group laid their infant on his or her stomach (11.1 percent and 8.5 percent, respectively).

- A majority of both WIC and non-WIC recipients said their infant had slept in the same bed with them or someone else (74.2 percent and 62.3 percent, respectively). However, infants of non-WIC recipients were more likely than WIC recipients to never sleep with anyone else (37.7 percent and 25.8 percent, respectively).

Table 15. WIC by Infant Sleeping Conditions

Infant sleeping conditions	WIC		Non-WIC	
	%	95% CI	%	95% CI
Infant's sleeping position				
On side	13.8	*(10.5,17.0)*	11.0	*(8.4,13.7)*
On back	73.2	*(68.6,77.7)*	79.1	*(75.7,82.5)*
On stomach	11.1	*(7.6,14.5)*	8.5	*(6.2,10.8)*
On side and back	1.5	*(0.3,2.7)*	1.4	*(0.4,2.4)*
On side and stomach	0.3	*(0.0,1.0)*	0.0	*(0.0,0.0)*
On back and stomach	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
All 3 positions	0.2	*(0.0,0.5)*	0.0	*(0.0,0.0)*
TOTAL%	100.1		100.0	
The extent to which infant sleeps with mother or anyone else				
Always	7.7	*(4.7,10.7)*	3.5	*(2.0,5.1)*
Almost always	12.8	*(9.3,16.3)*	8.8	*(6.4,11.1)*
Sometimes	23.0	*(18.8,27.1)*	22.1	*(18.6,25.5)*
Rarely	30.7	*(25.8,35.7)*	27.9	*(24.2,31.7)*
Never	25.8	*(21.2,30.3)*	37.7	*(33.7,41.7)*
TOTAL %	100.0		100.0	

REFERENCE TABLE 16.

- Proportions were similar between primiparas and multiparas with respect to infant sleeping positions. While a majority of primiparas and multiparas said they laid their infant on his or her back to sleep (80.3 percent and 74.3 percent, respectively), about one-tenth of respondents in each group said they laid their baby on his or her side, and about one-tenth laid the infant down to sleep on his or her stomach (8.3 percent and 10.1 percent, respectively).

- A majority of primiparas and multiparas said their infant had slept in the same bed with them or someone else (70.5 percent and 63.1 percent, respectively). However, 30 percent of primiparas and 37 percent of multiparas indicated their infant never slept with anyone else.

Table 16. Gravid Status by Infant Sleeping Conditions

Infant sleeping conditions	Primipara		Multipara	
	%	95% CI	%	95% CI
Infant's sleeping position				
On side	9.9	*(7.0,12.7)*	14.0	*(11.0,16.9)*
On back	80.3	*(76.3,84.2)*	74.3	*(70.5,78.0)*
On stomach	8.3	*(5.4,11.2)*	10.1	*(7.5,12.7)*
On side and back	1.4	*(0.3,2.5)*	1.5	*(0.4,2.5)*

Infant sleeping conditions	Primipara		Multipara	
	%	95% CI	%	95% CI
On side and stomach	0.0	*(0.0,0.0)*	0.2	*(0.0,0.6)*
On back and stomach	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*
All 3 positions	0.2	*(0.0,0.4)*	0.0	*(0.0,0.0)*
TOTAL%	100.1		100.1	
The extent to which infant sleeps with mother or anyone else				
Always	4.1	*(2.1,6.1)*	5.6	*(3.5,7.7)*
Almost always	9.3	*(6.4,12.2)*	10.9	*(8.2,13.6)*
Sometimes	24.5	*(20.3,28.7)*	20.5	*(17.1,23.8)*
Rarely	32.6	*(27.8,37.4)*	26.1	*(22.3,29.9)*
Never	29.5	*(25.0,34.0)*	36.9	*(32.8,41.1)*
TOTAL %	100.0		100.0	

REFERENCE TABLE 17.

- Three-fourths of respondents who were white said they laid their infant on his or her back when sleeping (77.6 percent) and approximately one-tenth laid their infant on his or her side or stomach (11.0 percent and 9.6 percent, respectively).

- Seventy-one percent of respondents who were Native American laid their infant on his or her back when sleeping and 21 percent laid the infant on their side. Unfortunately, data regarding infant sleeping positions among respondents of other races are not reportable due to too few responses.

- The majority of respondents who were white said their infant rarely or never slept with them or anyone else (65.3 percent).

- Nearly half of respondents who were Native American said their infant slept with them or someone else always or almost always (48.5 percent).

Table 17. Race by Infant Sleeping Position

Infant sleeping conditions	White		Native American		Other	
	%	95% CI	%	95% CI	%	95% CI
Infant's sleeping position						
On side	11.0	*(9.0,13.1)*	20.8	*(11.5,30.2)*	NR	*NR*
On back	77.6	*(74.8,80.4)*	70.5	*(59.4,81.5)*	NR	*NR*
On stomach	9.6	*(7.6,11.6)*	7.9	*(0.0,15.8)*	NR	*NR*
On side and back	1.5	*(0.7,2.3)*	0.8	*(0.0,2.4)*	NR	*NR*
On side and stomach	0.1	*(0.0,0.4)*	0.0	*(0.0,0.0)*	NR	*NR*
On back and stomach	0.0	*(0.0,0.0)*	0.0	*(0.0,0.0)*	NR	*NR*
All 3 positions	0.1	*(0.0,0.2)*	0.0	*(0.0,0.0)*	NR	*NR*
TOTAL %	99.9		100.0		NR	
The extent to which infant sleeps with mother or anyone else						
Always	3.1	*(1.9,4.4)*	25.4	*(15.0,35.7)*	NR	*NR*
Almost always	8.9	*(6.9,10.8)*	23.1	*(13.3,32.9)*	NR	*NR*
Sometimes	22.8	*(19.9,25.6)*	16.9	*(9.1,24.7)*	NR	*NR*
Rarely	29.5	*(26.4,32.6)*	17.3	*(8.2,26.4)*	NR	*NR*
Never	35.8	*(32.5,39.0)*	17.3	*(8.0,26.7)*	NR	*NR*
TOTAL %	100.1		100.0		NR	

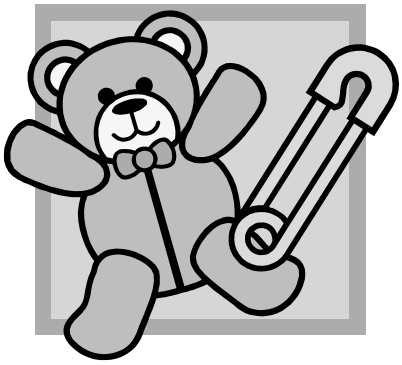
NOTE: NR means not reportable because of too few responses.

REFERENCE TABLE 18.

- Respondents who smoked at the time of the survey were more likely than those who did not smoke to allow smoking in their house or car (30.5 percent and 7.8 percent, respectively).

Table 18. Whether Respondent Smoked at Time of Survey by Smoking Behaviors in Home or Car

Smoking behaviors	No, did not smoke at time of survey		Yes, did smoke at time of survey	
	%	95% CI	%	95% CI
No smoking at all in house or car	92.2	*(90.2,94.2)*	69.5	*(63.1,75.9)*
Restricted smoking to one room in house	2.4	*(1.2,3.5)*	10.0	*(6.1,13.9)*
No one smokes when baby is in room or car	3.1	*(1.9,4.3)*	14.6	*(9.7,19.5)*
Smoking allowed anytime in house or car	0.3	*(0.0,0.6)*	4.6	*(1.2,8.1)*
Other	2.1	*(0.9,3.3)*	1.3	*(0.1,2.5)*
TOTAL %	100.1		100.0	



Breastfeeding

What moms had to say:

“I feel breastfeeding is crucial in the development of a mother and her baby. Not only is it healthy for the baby, it is beneficial to the mother as well; including weight loss & bonding w/ your baby. Breastfeeding has been the most wonderful experience for me & if it weren't for the support of my boyfriend, WIC & the nurses, I would have never even tried it. Please encourage "caregivers" to encourage breastfeeding.”

“I was very upset that the hospital gave my baby formula even though they new I was planning on breastfeeding. I was also upset that they kept taking my daughter out of my room at night and giving her a bottle even though I told them I didn't want them too. I wasn't pleased with them doing this at all.”

“I've found that breastfeeding my baby has seemed to help keep her healthy. She didn't contact RSV and hasn't had a serious problem with colds or ear infections (that I can tell) yet. Some of that also has to do with the fact that she doesn't go to daycare.”

“I think breastfeeding should be promoted more. There is so much emphasis on feeding your baby the "right" formula when all that effort should be going into "the only milk for babies is breastmilk." Also more education needs to be put out there on the importance of a healthy mother.

“Breastfeeding should be stressed more-healthy for babies, if the mother can. It's good if mother can stay home first year of life or longer-more contact the better off they are.”

REFERENCE TABLE 1.

- Two-thirds of respondents indicated their infant stayed in the same room with them while at the hospital (62.6 percent).

- With respect to breastfeeding experiences in the hospital:
    - A large majority of respondents said that hospital staff gave them information about breastfeeding (88.1 percent).
    - Two-thirds of respondents breastfed their baby in the hospital (69.0 percent). One-half breastfed in the first hour after delivery.
    - More than half said that hospital staff helped them learn how to breastfeed (56.9 percent).
    - Sixty-two percent of respondents said that hospital staff told them to breastfeed whenever the baby wanted. One-half fed their baby only breast milk while at the hospital (47.3 percent).
    - Two-thirds said the hospital gave them a telephone number to call for help with breastfeeding (62.9 percent).

- Seventy percent of respondents said their infant used a pacifier in the hospital.

- The vast majority of respondents received a gift pack with formula from the hospital (90.6 percent).

Table 1. Whether Various Breastfeeding Experiences Took Place at the Hospital

Breastfeeding experiences in the hospital	%	95% CI
Hospital staff gave information about breastfeeding		
No	11.9	*(9.8,14.0)*
Yes	88.1	*(86.0,90.2)*
TOTAL %	100.0	
Baby stayed in same room with mother at hospital		
No	37.4	*(34.2,40.5)*
Yes	62.6	*(59.5,65.8)*
TOTAL %	100.0	
Mother breastfed baby in hospital		
No	31.0	*(28.0,33.9)*
Yes	69.0	*(66.1,72.0)*
TOTAL %	100.0	
Mother breastfed baby in first hour after birth		
No	50.4	*(47.2,53.6)*
Yes	49.6	*(46.4,52.8)*
TOTAL %	100.0	
Hospital staff helped mother learn how to breastfeed		
No	43.1	*(39.9,46.3)*
Yes	56.9	*(53.7,60.1)*
TOTAL %	100.0	
Baby was fed only breast milk at the hospital		
No	52.7	*(49.5,55.9)*
Yes	47.3	*(44.1,50.5)*
TOTAL %	100.0	
Hospital staff told mother to breastfeed whenever baby wanted		
No	38.2	*(35.1,41.4)*
Yes	61.8	*(58.6,64.9)*
TOTAL %	100.0	

Breastfeeding experiences in the hospital	%	95% CI
Hospital staff gave mother a gift pack with formula		
No	9.4	*(7.4,11.3)*
Yes	90.6	*(88.7,92.6)*
TOTAL %	100.0	
Hospital gave mother a telephone number to call for help with breastfeeding		
No	37.1	*(34.0,40.2)*
Yes	62.9	*(59.8,66.0)*
TOTAL %	100.0	
Baby used a pacifier in the hospital		
No	30.0	*(27.0,33.0)*
Yes	70.0	*(67.0,73.0)*
TOTAL %	100.0	

REFERENCE TABLES 2-5.

- Overall, 72 percent of respondents said they had either breastfed or pumped breast milk to feed their new baby after delivery (data not shown). However:
    - Medicaid recipients were less likely than non-Medicaid recipients to have breastfed or pumped breast milk (63.5 percent and 74.7 percent, respectively).
    - WIC recipients were less likely than non-WIC recipients to have breastfed or pumped breast milk (61.6 percent and 77.6 percent, respectively).
    - Multiparas were less likely than primiparas to have breastfed or pumped breast milk (67.0 percent and 78.5 percent, respectively).

- One-half of respondents who were Native American breastfed or pumped breast milk (48.7 percent) compared to three-fourths of white respondents (73.0 percent). Caution should be used when interpreting data regarding breastfeeding and Native American respondents due to small numbers. Unfortunately, data regarding breastfeeding among respondents of other races are not reportable due to too few responses.

Table 2. Medicaid Status by Whether Respondent Breastfed or Pumped Breast Milk

Response	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
No	36.5	*(31.1,41.9)*	25.3	*(21.9,28.8)*
Yes	63.5	*(58.1,68.9)*	74.7	*(71.3,78.2)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 3. WIC Status by Whether Respondent Breastfed or Pumped Breast Milk

Response	WIC		Non-WIC	
	%	95% CI	%	95% CI
No	38.4	*(33.3,43.5)*	22.4	*(18.9,25.9)*
Yes	61.6	*(56.6,66.7)*	77.6	*(74.1,81.1)*
TOTAL %	100.0		100.0	

Table 4. Gravid Status by Whether Respondent Breastfed or Pumped Breast Milk

Response	Primipara		Multipara	
	%	95% CI	%	95% CI
No	21.6	*(17.4,25.7)*	33.0	*(29.0,37.0)*
Yes	78.5	*(74.3,82.6)*	67.0	*(63.0,71.0)*
TOTAL %	100.1		100.0	

Table 5. Race by Whether Respondent Breastfed or Pumped Breast Milk

Response	White		Native American*		Other	
	%	95% CI	%	95% CI	%	95% CI
No	27.0	*(24.0,30.0)*	51.3	*(39.6,62.9)*	NR	*NR*
Yes	73.0	*(70.0,76.0)*	48.7	*(37.1,60.4)*	NR	*NR*
TOTAL %	100.0		100.0		NR	

*Caution should be used when interpreting data regarding breastfeeding and Native American respondents due to small numbers.
NOTE: NR means not reportable due to too few responses.

REFERENCE TABLE 6.

- Of all respondents, nearly three in 10 said they never breastfed their baby (28.5 percent).
- Of all respondents, nearly three in 10 breastfed for 11 weeks or less (29.1 percent). Nearly two in five respondents were still breastfeeding at the time of the survey (38.1 percent).
- Of respondents who did breastfeed, 53 percent indicated they were still breastfeeding at the time of the survey (data not shown).
- Of respondents who breastfed their baby, but had stopped by the time of the survey, the average number of weeks they breastfed was 5.7 weeks (data not shown).

Table 6. Of All Respondents, Duration of Breastfeeding

Duration of breastfeeding	%	95% CI
Never breastfed	28.5	*(25.6,31.4)*
Less than 1 week	3.9	*(2.7,5.2)*
1 to 11 weeks	25.2	*(22.4,28.0)*
12 to 18 weeks	4.3	*(3.0,5.6)*
Still breastfeeding at time of survey	38.1	*(34.9,41.2)*
TOTAL %	100.0	

REFERENCE TABLE 7.

- Among respondents who breastfed their infants, the average age of the infant at the time they were first fed anything other than breast milk was 5.2 weeks (data not shown).
- One-fifth of respondents said their infant was less than one week old when they were fed something other than breast milk (21.6 percent).
- One-fifth indicated that, at the time of the survey, they had not fed their infant anything other than breast milk (22.5 percent).

Table 7. Of Respondents Who Breastfed, Age of Infant at the First Time Infant Was Fed Something Other Than Breast Milk

Age of infant	%	95% CI
Less than 1 week	21.6	*(18.3,24.8)*
1 to 2 weeks	10.3	*(8.0,12.6)*
3 to 6 weeks	22.3	*(19.1,25.5)*
7 to 12 weeks	11.6	*(9.2,14.1)*
13 to 18 weeks	11.7	*(9.2,14.2)*
Have not fed anything besides breast milk	22.5	*(19.2,25.7)*
TOTAL %	100.0	

REFERENCE TABLES 8-10.

- Medicaid recipients:
    - Were more likely than non-Medicaid recipients to have never breastfed their infant (36.7 percent and 25.5 percent, respectively).
    - Were half as likely as non-Medicaid recipients to be still breastfeeding at the time of the survey (23.2 percent and 43.4 percent, respectively).

- WIC recipients:
    - Were more likely than non-WIC recipients to have never breastfed their infant (38.4 percent and 22.6 percent, respectively).
    - Were half as likely as non-WIC recipients to be still breastfeeding at the time of the survey (25.1 percent and 45.9 percent, respectively).

- Primiparas:
    - Were more likely than multiparas to have stopped breastfeeding by 12 weeks (33.5 percent and 19.1 percent, respectively).
    - Were as likely as multiparas to be still breastfeeding at the time of survey (35.6 percent and 40.1 percent, respectively).

- Multiparas were more likely than primiparas to have never breastfed their infant (33.3 percent and 21.7 percent, respectively).

Table 8. Medicaid Status by Duration of Breastfeeding

Duration of breastfeeding	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Never breastfed	36.7	*(31.2,42.1)*	25.5	*(22.0,29.0)*
Less than 1 week	4.3	*(2.1,6.4)*	3.8	*(2.3,5.4)*
1 to 11 weeks	32.4	*(27.2,37.7)*	22.5	*(19.2,25.9)*
12 to 18 weeks	3.5	*(1.6,5.3)*	4.7	*(3.0,6.4)*
Still breastfeeding	23.2	*(18.6,27.8)*	43.4	*(39.5,47.4)*
TOTAL %	100.1		99.9	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 9. WIC Status by Duration of Breastfeeding

Duration of breastfeeding	WIC		Non-WIC	
	%	95% CI	%	95% CI
Never breastfed	38.4	*(33.4,43.5)*	22.6	*(19.1,26.1)*
Less than 1 week	4.6	*(2.3,6.8)*	3.6	*(2.1,5.1)*
1 to 11 weeks	29.2	*(24.5,33.9)*	22.9	*(19.3,26.4)*
12 to 18 weeks	2.8	*(1.3,4.3)*	5.1	*(3.2,6.92)*
Still breastfeeding	25.1	*(20.5,29.7)*	45.9	*(41.7,50.1)*
TOTAL %	100.1		100.1	

Table 10. Gravid Status by Duration of Breastfeeding

Duration of breastfeeding	Primipara		Multipara	
	%	95% CI	%	95% CI
Never breastfed	21.7	*(17.5,25.8)*	33.3	*(29.2,37.3)*
Less than 1 week	4.7	*(2.6,6.9)*	3.3	*(1.8,4.8)*
1 to 11 weeks	33.5	*(28.8,38.3)*	19.1	*(15.7,22.5)*
12 to 18 weeks	4.5	*(2.5,6.4)*	4.3	*(2.5,6.1)*
Still breastfeeding	35.6	*(30.8,40.4)*	40.1	*(35.8,44.3)*
TOTAL %	100.0		100.1	

REFERENCE TABLE 11.

- One-half of respondents who were Native American never breastfed their infant compared to one-fourth of respondents who were white (51.3 percent and 27.2 percent, respectively).

- More than one-third of respondents who were white were still breastfeeding at the time of the survey compared to one-fifth of Native American respondents (39.1 percent and 18.4 percent, respectively).

- Caution should be used when interpreting data regarding breastfeeding and Native American respondents due to small numbers.

Table 11. Race by Duration of Breastfeeding

Duration of breastfeeding	White		Native American*		Other	
	%	95% CI	%	95% CI	%	95% CI
Never breastfed	27.2	*(24.2,30.2)*	51.3	*(39.6,62.9)*	NR	*NR*
Less than 1 week	4.3	*(2.9,5.7)*	0.8	*(0.0,2.4)*	NR	*NR*
1 to 11 weeks	25.4	*(22.4,28.4)*	22.2	*(12.9,31.4)*	NR	*NR*
12 to 18 weeks	4.0	*(2.7,5.4)*	7.3	*(0.7,14.0)*	NR	*NR*
Still breastfeeding	39.1	*(35.7,42.4)*	18.4	*(8.9,27.9)*	NR	*NR*
TOTAL %	100.0		100.0		NR	

*Caution should be used when interpreting data regarding breastfeeding and Native American respondents due to small numbers.
NOTE: NR means not reportable due to too few responses.

REFERENCE TABLE 12.

- Respondents who were in school or working were less likely than respondents who were not in school or working to be still breastfeeding at the time of the survey (33.3 percent and 45.4 percent, respectively).

Table 12. Whether Respondent Was in School or Working Outside the Home by Duration of Breastfeeding

Duration of breastfeeding	In school or working		NOT in school or working	
	%	95% CI	%	95% CI
Never breastfed	29.0	*(25.1,32.8)*	27.7	*(23.1,32.2)*
Less than 1 week	5.4	*(3.5,7.3)*	1.7	*(0.5,2.9)*
1 to 11 weeks	27.4	*(23.7,31.1)*	21.9	*(17.6,26.2)*
12 to 18 weeks	4.9	*(3.1,6.8)*	3.4	*(1.6,5.3)*
Still breastfeeding	33.3	*(29.3,37.3)*	45.4	*(40.3,50.5)*
TOTAL %	100.0		100.1	

REFERENCE TABLES 13-15.

- The most common reason why respondents stopped breastfeeding was the respondent did not think she was producing enough milk. Other reasons common to all groups were: the baby had difficulty nursing; breast milk alone did not satisfy the baby; the mother went back to work or school; and mother's nipples were sore, cracked, or bleeding.

- Medicaid recipients were more likely than non-Medicaid recipients to stop breastfeeding because:
    - The mother had too many other household duties (19.9 percent and 8.6 percent, respectively).

- The mother wanted or needed someone else to feed the baby (23.1 percent and 11.8 percent, respectively).

- WIC recipients were more likely than non-WIC recipients to stop breastfeeding because the mother became sick and could not breastfeed (11.8 percent and 3.6 percent, respectively).

- Primiparas were more likely than multiparas to stop breastfeeding because:
  - The baby had difficulty nursing (34.2 percent and 20.6 percent, respectively).

- Many respondents said there were other reasons why they stopped breastfeeding. The most common responses were that mothers were prescribed medications that transferred through the breast milk and were not safe for infants. Some mothers said they were very tired and had other children to care for. Other family circumstances made it difficult to spend the time needed to breastfeed (e.g., family members were hospitalized, full-time school). Others said that it was very time consuming to pump breast milk, and that it took too much time away from the baby. A few mothers said their baby would not take the breast, never latched on, or got used to a bottle.

Table 13. Medicaid Status by Reasons Why Respondent Stopped Breastfeeding

Reasons	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
Baby had difficulty nursing				
No	68.8	*(60.8,76.9)*	73.5	*(67.2,79.8)*
Yes	31.2	*(23.1,39.3)*	26.5	*(20.2,32.8)*
TOTAL%	100.0		100.0	
Breast milk alone did not satisfy baby				
No	69.8	*(62.2,77.4)*	70.1	*(63.7,76.5)*
Yes	30.2	*(22.6,37.8)*	29.9	*(23.6,36.3)*
TOTAL%	100.0		100.0	
Mother thought baby was not gaining enough weight				
No	94.0	*(90.6,97.3)*	92.5	*(88.7,96.3)*
Yes	6.0	*(2.7,9.4)*	7.5	*(3.7,11.3)*
TOTAL%	100.0		100.0	
Baby became sick and could not breastfeed				
No	94.0	*(90.1,97.9)*	96.6	*(93.8,99.3)*
Yes	6.0	*(2.1,9.9)*	3.4	*(0.7,6.2)*
TOTAL%	100.0		100.0	
Nipples were sore, cracked, or bleeding				
No	78.3	*(71.0,85.5)*	81.9	*(76.4,87.4)*
Yes	21.8	*(14.5,29.0)*	18.1	*(12.7,23.6)*
TOTAL%	100.1		100.0	
Mother thought she was not producing enough milk				
No	59.5	*(51.2,67.7)*	69.6	*(63.1,76.0)*
Yes	40.5	*(32.3,48.8)*	30.4	*(24.0,36.9)*
TOTAL%	100.0		100.0	
Mother had too many other household duties				
No	80.2	*(72.7,87.6)*	91.4	*(87.4,95.4)*
Yes	19.9	*(12.4,27.3)*	8.6	*(4.6,12.6)*
TOTAL%	100.1		100.0	
Mother felt it was the right time to stop breastfeeding				
No	90.0	*(85.1,94.8)*	85.6	*(80.4,90.8)*
Yes	10.0	*(5.2,14.9)*	14.4	*(9.2,19.6)*
TOTAL%	100.0		100.0	
Mother became sick and could not breastfeed				
No	89.8	*(84.9,94.7)*	94.9	*(91.9,97.8)*
Yes	10.2	*(5.3,15.2)*	5.2	*(2.2,8.1)*

Reasons	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
TOTAL%	100.0		100.1	
Mother went back to work or school				
No	71.7	*(63.7,79.7)*	69.7	*(63.3,76.1)*
Yes	28.3	*(20.3,36.3)*	30.3	*(23.9,36.7)*
TOTAL%	100.0		100.0	
Husband or partner wanted mother to stop breastfeeding				
No	95.8	*(92.5,99.0)*	97.3	*(95.3,99.5)*
Yes	4.2	*(1.0,7.5)*	2.7	*(0.5,4.9)*
TOTAL%	100.0		100.0	
Mother wanted or needed someone else to feed the baby				
No	76.9	*(69.6,84.3)*	88.2	*(83.6,92.8)*
Yes	23.1	*(15.8,30.5)*	11.8	*(7.2,16.4)*
TOTAL%	100.0		100.0	
Other reasons				
No	70.1	*(62.4,77.8)*	76.8	*(70.9,82.8)*
Yes	30.0	*(22.3,37.7)*	23.2	*(17.2,29.1)*
TOTAL%	100.1		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 14. WIC Status by Reasons Why Respondent Stopped Breastfeeding

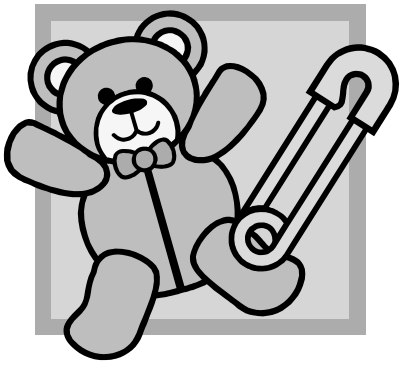
Reasons	WIC		Non- WIC	
	%	95% CI	%	95% CI
Baby had difficulty nursing				
No	73.5	*(65.9,81.1)*	71.5	*(64.9,78.2)*
Yes	26.5	*(18.9,34.1)*	28.5	*(21.9,35.1)*
TOTAL%	100.0		100.0	
Breast milk alone did not satisfy baby				
No	67.8	*(60.2,75.5)*	71.9	*(65.4,78.4)*
Yes	32.2	*(24.5,39.8)*	28.1	*(21.6,34.6)*
TOTAL%	100.0		100.0	
Mother thought baby was not gaining enough weight				
No	89.7	*(84.4,95.1)*	95.0	*(92.0,98.1)*
Yes	10.3	*(4.9,15.6)*	5.0	*(2.0,8.0)*
TOTAL%	100.0		100.0	
Baby became sick and could not breastfeed				
No	95.5	*(92.6,98.4)*	95.9	*(92.7,99.1)*
Yes	4.5	*(1.6,7.4)*	4.1	*(1.0,7.3)*
TOTAL%	100.0		100.0	
Nipples were sore, cracked, or bleeding				
No	77.2	*(70.2,84.3)*	82.3	*(76.6,87.9)*
Yes	22.8	*(15.7,29.8)*	17.7	*(12.1,23.4)*
TOTAL%	100.0		100.0	
Mother thought she was not producing enough milk				
No	64.1	*(56.3,71.9)*	68.6	*(61.8,75.3)*
Yes	35.9	*(28.1,43.7)*	31.5	*(24.7,38.2)*
TOTAL%	100.0		100.1	
Mother had too many other household duties				
No	84.6	*(78.2,91.0)*	89.8	*(85.3,94.2)*
Yes	15.4	*(9.0,21.8)*	10.2	*(5.8,14.7)*
TOTAL%	100.0		100.0	
Mother felt it was the right time to stop breastfeeding				

Reasons	WIC		Non- WIC	
	%	95% CI	%	95% CI
No	90.4	*(85.3,95.4)*	84.8	*(79.4,90.3)*
Yes	9.6	*(4.6,14.7)*	15.2	*(9.8,20.6)*
TOTAL%	100.0		100.0	
Mother became sick and could not breastfeed				
No	88.2	*(83.0,93.4)*	96.4	*(93.9,98.9)*
Yes	11.8	*(6.6,17.0)*	3.6	*(1.1,6.1)*
TOTAL%	100.0		100.0	
Mother went back to work or school				
No	72.5	*(64.9,80.1)*	68.9	*(62.2,75.6)*
Yes	27.5	*(20.0,35.1)*	31.1	*(24.4,37.8)*
TOTAL%	100.0		100.0	
Husband or partner wanted mother to stop breastfeeding				
No	96.0	*(92.8,99.1)*	97.4	*(95.2,99.6)*
Yes	4.0	*(0.9,7.2)*	2.6	*(0.4,4.8)*
TOTAL%	100.0		100.0	
Mother wanted or needed someone else to feed the baby				
No	79.2	*(72.3,86.1)*	88.0	*(83.3,92.6)*
Yes	20.8	*(13.9,27.7)*	12.1	*(7.4,16.7)*
TOTAL%	100.0		100.1	
Other reasons				
No	73.0	*(65.6,80.4)*	75.0	*(68.8,81.2)*
Yes	27.0	*(19.6,34.4)*	25.0	*(18.8,31.2)*
TOTAL%	100.0		100.0	

Table 15. Gravid Status by Reasons Why Respondent Stopped Breastfeeding

Reasons	Primipara		Multipara	
	%	95% CI	%	95% CI
Baby had difficulty nursing				
No	65.8	*(58.5,73.1)*	79.4	*(73.0,85.9)*
Yes	34.2	*(26.9,41.5)*	20.6	*(14.1,27.0)*
TOTAL%	100.0		100.0	
Breast milk alone did not satisfy baby				
No	72.2	*(65.7,78.8)*	67.8	*(60.4,75.3)*
Yes	27.8	*(21.2,34.3)*	32.2	*(24.7,39.6)*
TOTAL%	100.0		100.0	
Mother thought baby was not gaining enough weight				
No	93.1	*(89.5,96.6)*	93.0	*(88.7,97.3)*
Yes	7.0	*(3.4,10.5)*	7.0	*(2.7,11.3)*
TOTAL%	100.1		100.0	
Baby became sick and could not breastfeed				
No	97.6	*(95.6,99.6)*	93.7	*(89.6,97.8)*
Yes	2.4	*(0.4,4.5)*	6.3	*(2.2,10.5)*
TOTAL%	100.0		100.0	
Nipples were sore, cracked, or bleeding				
No	77.3	*(70.9,83.6)*	84.1	*(78.1,90.0)*
Yes	22.8	*(16.4,29.1)*	15.9	*(10.0,21.9)*
TOTAL%	100.1		100.0	
Mother thought she was not producing enough milk				
No	63.9	*(56.7,71.0)*	69.5	*(62.2,76.7)*
Yes	36.1	*(29.0,43.3)*	30.5	*(23.3,37.8)*
TOTAL%	100.0		100.0	

Reasons	Primipara		Multipara	
	%	95% CI	%	95% CI
Mother had too many other household duties				
No	92.5	*(88.3,96.6)*	82.6	*(76.5,88.7)*
Yes	7.6	*(3.4,11.7)*	17.4	*(11.3,23.5)*
TOTAL%	100.1		100.0	
Mother felt it was the right time to stop breastfeeding				
No	89.1	*(84.0,94.2)*	84.8	*(79.0,90.6)*
Yes	10.9	*(5.8,16.0)*	15.2	*(9.4,21.0)*
TOTAL%	100.0		100.0	
Mother became sick and could not breastfeed				
No	95.4	*(92.6,98.1)*	90.8	*(86.4,95.3)*
Yes	4.6	*(1.9,7.4)*	9.2	*(4.7,13.6)*
TOTAL%	100.0		100.0	
Mother went back to work or school				
No	66.3	*(59.1,73.5)*	74.5	*(67.6,81.3)*
Yes	33.7	*(26.5,40.9)*	25.5	*(18.7,32.4)*
TOTAL%	100.0		100.0	
Husband or partner wanted mother to stop breastfeeding				
No	98.2	*(96.3,100.0)*	95.3	*(92.1,98.4)*
Yes	1.8	*(0.0,3.7)*	4.8	*(1.6,7.9)*
TOTAL%	100.0		100.1	
Mother wanted or needed someone else to feed the baby				
No	83.3	*(77.7,88.8)*	86.2	*(80.7,91.8)*
Yes	16.8	*(11.2,22.3)*	13.8	*(8.3,19.3)*
TOTAL%	100.1		100.0	
Other reasons				
No	75.1	*(68.5,81.6)*	73.7	*(66.8,80.5)*
Yes	24.9	*(18.4,31.5)*	26.4	*(19.5,33.2)*
TOTAL%	100.0		100.1	



Injury Prevention

What moms had to say:

“When we had our first child it was really helpful that the hospital gave us a car seat to take the baby home in. It not only provided safety for the baby but gave us a piece of mind knowing the hospital cared for the child even after it was born. It is unfortunate that since our first child was born and now 2 1/2 years later when our second child was born, the hospital no longer provides the free car seat. It was also nice to have a spare in case someone else needed to pick up our child. Thank you!!”

“They should give all new mothers a quick class in CPR before they leave the Hospital. Because once they leave it's so hard to set up classes because you are busy taking care of your children. Example, for choking or resuscitation in case they stop breathing.”

"Airbags worried me."

REFERENCE TABLE 1.

- The vast majority of respondents indicated they have a working smoke alarm in their home (95.9 percent), and that there are no loaded guns, rifles, or other firearms in their home (96.9 percent).

Table 1. Safety Issues With Respect to Respondent's Home

Safety issues	%	95% CI
Respondent's home has a working smoke alarm		
No	4.1	*(2.8,5.4)*
Yes	95.9	*(94.6,97.2)*
TOTAL %	100.0	
There are loaded guns, rifles, or other firearms in respondent's home		
No	96.9	*(95.7,98.1)*
Yes	3.1	*(1.9,4.3)*
TOTAL %	100.0	

REFERENCE TABLE 2.

- Nearly all respondents said their infant was brought home from the hospital in an infant car seat (99.4 percent), and that their baby always or almost always rides in an infant car seat (99.5 percent).

- Forty-two percent of respondents said the car safety seat they use for their baby was purchased new. Twenty-three percent said they had a car safety seat from another of their babies.

Table 2. Infant Car Seat Safety Issues

Safety issues	%	95% CI
Infant was brought home from the hospital in an infant car seat		
No	0.6	*(0.0,1.1)*
Yes	99.4	*(98.9,100.0)*
TOTAL %	100.0	
Baby always or almost always rides in an infant car seat		
No	0.5	*(0.0,1.0)*
Yes	99.5	*(99.0,100.0)*
TOTAL %	100.0	
Where respondent got the car safety seat she uses for the baby		
Purchased new for this baby	42.0	*(38.7,45.2)*
Received new for this baby as a gift	11.6	*(9.6,13.7)*
Had one from another of my babies	22.8	*(20.1,25.5)*
Purchased used (at a rummage sale or thrift store)	2.6	*(1.7,3.6)*
Received or purchased from a family member or friend	11.3	*(9.3,13.4)*
Given by hospital when baby was born	6.4	*(4.7,8.0)*
Rented it from a car seat rental program	1.4	*(0.6,2.1)*
We do not use a care safety seat	0.0	*(0.0,0.0)*
Other	2.0	*(1.0,2.9)*
TOTAL %	100.1	

REFERENCE TABLE 3.

- Overall, one-fourth of respondents said they worried that wearing a seatbelt during pregnancy would hurt the baby (23.3 percent). Less than half said a health care worker had talked with them about using a seatbelt during pregnancy (46.0 percent).

Table 3. Seat Belt Issues Relating to Respondent

Seat belt issues	%	95% CI
Whether respondent worried that wearing a seatbelt during pregnancy would hurt the baby		
No	76.7	*(74.0,79.5)*
Yes	23.3	*(20.5,26.0)*
TOTAL %	100.0	
Whether a health care worker talked with respondent, during a prenatal care visit, about using a seatbelt during pregnancy		
No	54.0	*(50.8,57.3)*
Yes	46.0	*(42.7,49.2)*
TOTAL %	100.0	

REFERENCE TABLES 4-6.

- Respondents who were Medicaid recipients were more likely than non-Medicaid recipients to worry that wearing a seat belt during pregnancy would harm the baby (31.2 percent and 19.9 percent, respectively).

- Respondents who were WIC recipients were more likely than non-WIC recipients to worry that wearing a seat belt during pregnancy would harm the baby (27.8 percent and 20.7 percent, respectively).

- Primiparas were more likely than multiparas to worry that wearing a seatbelt during pregnancy would harm the baby (29.5 percent and 18.6 percent, respectively).

Table 4. Medicaid Status by Whether Respondent Worried About Seat Belt Use

	Medicaid*		Non-Medicaid	
	%	95% CI	%	95% CI
No, not worried about seatbelt use	68.8	*(63.5,74.0)*	80.1	*(76.9,83.3)*
Yes, worried about seatbelt use	31.2	*(26.0,36.5)*	19.9	*(16.7,23.2)*
TOTAL %	100.0		100.0	

*CDC defines a Medicaid recipient as a woman who reported receiving Medicaid prior to pregnancy or used Medicaid to pay for prenatal care or the delivery.

Table 5. WIC Status by Whether Respondent Worried About Seat Belt Use

	WIC		Non-WIC	
	%	95% CI	%	95% CI
No, not worried about seatbelt use	72.2	*(67.5,76.9)*	79.3	*(75.9,82.7)*
Yes, worried about seatbelt use	27.8	*(23.1,32.5)*	20.7	*(17.3,24.1)*
TOTAL %	100.0		100.0	

Table 6. Gravid Status by Whether Respondent Worried About Seat Belt Use

	Primipara		Multipara	
	%	95% CI	%	95% CI
No, not worried about seatbelt use	70.5	*(65.9,75.1)*	81.4	*(78.0,84.7)*
Yes, worried about seatbelt use	29.5	*(24.9,34.1)*	18.6	*(15.3,22.0)*
TOTAL %	100.0		100.0	

"Shaken baby syndrome is a form of child abuse that occurs when a child is vigorously shaken or slammed. Shaking causes a baby's head to whip back and forth, slamming the brain repeatedly against the skull. It takes only a few seconds to cause serious, lifelong brain damage or death.

In 1997, the North Dakota Department of Health began a two-year shaken baby syndrome prevention campaign with a message of '*Never, Never Shake a Baby'.*"

1999 North Dakota New Mothers' Survey

REFERENCE TABLE 7.

- The most common responses given by respondents when asked where they heard or read the message "Never, Never Shake a Baby" were in a brochure (76.6 percent), on a billboard (70.3 percent), on a poster (66.6 percent), and on a baby rattle (59.0 percent).

Table 7. Areas Where Respondent May Have Heard or Read the "Never, Never Shake a Baby" Message

Location of message	%	95% CI
Billboards along highways or roads		
No	29.8	*(26.8,32.7)*
Yes	70.3	*(67.3,73.2)*
TOTAL %	100.1	
On a poster		
No	33.4	*(30.3,36.4)*
Yes	66.6	*(63.6,69.7)*
TOTAL %	100.0	
In a brochure		
No	23.4	*(20.7,26.2)*
Yes	76.6	*(73.8,79.3)*
TOTAL %	100.0	
On the radio		
No	58.7	*(55.5,61.8)*
Yes	41.3	*(38.2,44.5)*
TOTAL %	100.0	
On a baby rattle		
No	41.1	*(37.9,44.2)*
Yes	59.0	*(55.8,62.1)*
TOTAL %	100.1	
On a milk carton		
No	85.3	*(83.0,87.5)*
Yes	14.7	*(12.5,17.0)*
TOTAL %	100.0	
On a videotape		
No	69.2	*(66.3,72.2)*
Yes	30.8	*(27.8,33.7)*
TOTAL %	100.0	
Respondent has never seen or heard the message		
No	98.4	*(97.5,99.2)*
Yes	1.6	*(0.8,2.5)*
TOTAL %	100.0	
Other		
No	98.4	*(97.5,99.2)*
Yes	1.6	*(0.8,2.5)*
TOTAL %	100.0	