

Tennessee

**Pregnancy
Risk**

**Assessment
Monitoring
System**

2009

Summary Report

PRAMS

Healthy Babies Start
With Healthy Mothers

Acknowledgments

Tennessee PRAMS project staff would like to express their gratitude to all of the mothers who took time to participate in the survey. Their information will provide a better understanding of the health of mothers and babies in Tennessee.

Project staff would like to acknowledge the PRAMS Steering Committee, as well as Kathy Henson and Colleen Edgell for their administrative support. We would also like to thank the CDC/PRAMS project manager for Tennessee, LaTreace Q. Harris, for her support and assistance and Margaret Major, Director of Women's Health and Genetics in the Department of Health, who also provided support and assistance in the development and implementation of Tennessee PRAMS.

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Executive Summary

The Tennessee Pregnancy Risk Assessment Monitoring System (TN PRAMS) is a state-wide population-based survey based on a stratified random sample of women who gave birth to a live-born infant in 2009. The topics included in the survey were selected based on their relevance to maternal and infant health. The following summary highlights important findings within the report:

- Approximately 45% of women were overweight or obese at the time they became pregnant.
- Over two-thirds of mothers did not receive preconception counseling.
- Almost three-quarters of women did not take a daily multivitamin in the month prior to pregnancy.
- One-half of pregnancies were unintended.
- Among women *not* trying to get pregnant, approximately one-half were also not using birth control.
- Nearly one-fifth of women received late or no prenatal care.
- Over one-quarter of women did not receive an HIV test during pregnancy or delivery.
- Nearly two-thirds of women did not see a dentist during pregnancy, and among those with a reported dental problem over one-half did not go to a dentist or dental clinic.
- Just over one-half of mothers gained more weight than recommended during pregnancy.
- Approximately 8% of women developed gestational diabetes.
- Approximately 22% of women smoked cigarettes and 6% drank alcohol during the last 3 months of pregnancy.
- Over one-half of women were enrolled in the Supplemental Nutrition Program for Women, Infants and Children (WIC) during pregnancy.
- Approximately 5% of mothers reported physical abuse before and/or during pregnancy.
- A majority of women (80%) reported at least one stressor in the 12 months prior to delivery, with financial-related problems being the most frequently reported type of stressor.
- Approximately 28% of women reported symptoms of postpartum depression.
- The majority of mothers (87%) were using postpartum birth control at the time of the survey.
- The majority of mothers (87%) had received a postpartum checkup for themselves, and 97% reported that their infant had had a well-baby checkup.
- Over one-third of mothers did not initiate breastfeeding, with not wanting to being the most frequently reported reason for not doing so.
- About 39% of women who initiated breastfeeding breastfed for less than 8 weeks.
- Over one-third of mothers did not use the back sleeping position for their infant and over two-fifths reported bed sharing with their infant.
- Approximately 12% of mothers reported that their infants were exposed to secondhand smoke.
- Approximately 6% of women reported there was not a working smoke alarm in their home, and 8% reported that there was a loaded firearm in their home.

Overview

Background

Infant mortality rates in Tennessee are consistently higher than the national rate and have shown little change in recent years. Racial disparities in infant mortality have also persisted, with black babies in Tennessee 2.5 times as likely as white babies to die in their first year of life. Racial disparities in infant mortality are related in-part to differences in recognized risk factors for infant mortality. Based on Tennessee birth certificate data, the prevalence of each of the following risk factors are higher among infants born to black mothers than among infants born to white mothers: low birthweight, prematurity, no prenatal care, a mother with a previous child death, an unmarried mother, a mother with high school or lower education, a teenaged mother and multiple births. In order to reduce infant mortality in Tennessee, these risk factors need to be addressed. However, the above information is limited to data collected on birth and death certificates and infant mortality risk factors such as low birthweight and prematurity are in actuality pregnancy outcomes that are affected by conditions of a pregnancy. While this information is vital to understanding and reducing the burden of infant mortality in the state, it does not address the behavioral, economic and social risk factors that occur prior to, during and after pregnancy that affect the health and well being of the mother, the developing fetus and the infant.

The Tennessee Department of Health (TDH) recognizes the need for maternal and child health data beyond that available from our current systems of vital and programmatic records. The Tennessee Pregnancy Risk Assessment Monitoring System (TN PRAMS), which collects information on maternal behaviors and experiences prior to, during and after pregnancy, provides data vital to our efforts to appropriately target programs and activities, and to ultimately improve birth outcomes and the health of both mothers and children in the state.

Survey Methodology

Tennessee PRAMS is conducted by the Research Division of the Office of Policy, Planning and Assessment in the TDH. The project was established in 2006 through a collaborative agreement between the Centers for Disease Control and Prevention (CDC) and TDH. Tennessee PRAMS was designed to collect, analyze, and disseminate information on a variety of maternal behaviors and experiences that may be associated with various birth outcomes.

Tennessee PRAMS is a statewide population-based survey of new mothers. Over the course of 2009, approximately 1,200 women were selected to participate in the survey from the Tennessee Vital Statistics birth file. They were selected using stratified random sampling. Mothers were first separated into two different groups (or strata) based on infant birthweight. Subsequently, mothers in the low birthweight (LBW) group, under 2,500 grams or 5.5 pounds, were sampled at a higher rate than those in the normal birthweight (NBW) group. That is, women giving birth to LBW infants were oversampled. Oversampling makes it possible to better estimate risks for high-risk groups, which are often relatively small compared to the general population. Sampling of the 2009 mothers was done monthly from April 2009 through April 2010. In order to be eligible for selection, mothers had to be Tennessee residents and have delivered a live-born infant within the timeframe of two to six months prior to the sampling date. Each mother was eligible to participate in the sampling process only once.

Selected mothers were then notified in a pre-letter that they had been selected to participate in the PRAMS survey. Shortly thereafter they were sent the PRAMS questionnaire via mail. If the mother did not respond after three mail survey attempts, she was contacted by telephone and given the opportunity to complete the questionnaire via phone interview. The questionnaire consisted of 84 standardized questions (see Appendix). There were four versions of the questionnaire available:

English adult, Spanish adult, English teen and Spanish teen. Mothers whose ethnicity was marked as ‘Hispanic’ on the birth certificate were sent both an English and Spanish version. Mothers under 18 years of age were sent the teen version(s). A bilingual telephone interviewer was available for mothers more comfortable communicating in Spanish.

After data collection was concluded, women’s responses were linked to their corresponding birth certificate data. This linked PRAMS response/birth certificate dataset was then sent to the CDC for weighting. Weighting allows for the estimation of statistics for the entire population of women who delivered a live-born infant in Tennessee in 2009. Tennessee PRAMS data is weighted based on sample design, non-response and non-coverage. In 2009, 740 out of 1,162 sampled mothers completed the questionnaire and the overall, weighted response rate was 67%. The weighted response rates among mothers of LBW and NBW infants were 60% and 68%, respectively.

Data Analysis

All data in this report were analyzed using the proc crosstab procedure in SAS-Callable SUDAAN release 10.0. Most data are presented as simple descriptive statistics and two-way comparisons. Each topic area is organized to include a table(s) which presents the prevalence of indicator(s) by select demographic and socioeconomic characteristics (race/ethnicity, age, marital status, education, income, insurance, urban/rural residence), as well as graphical presentations of subgroup analyses. All prevalence tables include 95% confidence intervals (95% CI), which were used to determine if prevalence rates between demographic/socioeconomic groups, e.g. black non-Hispanics (black NH) vs. white non-Hispanics (white NH), were statistically significant. If the 95% confidence intervals did not overlap, the difference was determined to be statistically significant at the 0.05 level. The comparison of confidence intervals method is a conservative test of statistical significance. Thus, findings of non-significant differences should be interpreted with caution, especially when the two confidence intervals overlap only slightly. Two-way comparisons for subgroup analyses were tested for statistical significance using a chi-square test, with p-values of less than 0.05 considered significant. Unless otherwise indicated, differences noted in the text are statistically significant.

Because estimates based on small samples are imprecise and may be biased, estimates for which the number of respondents was fewer than 30 (unweighted sample size) are not reported. Only 49 Hispanic women (unweighted sample size) completed the survey. Due to this small sample size and the correspondingly large 95% confidence intervals, estimates for this group should be interpreted with caution.

The following table summarizes the demographic and socioeconomic characteristics of survey respondents:

Respondent Characteristics (Weighted %), 2009 Tennessee PRAMS					
Race	White NH	69.4%	Household Income	<\$10,000	29.5%
	Black NH	17.7%		\$10-19,999	19.6%
	Hispanic	8.4%		\$20-49,999	27.4%
	Other	4.6%		\$50,000+	23.6%
Age (years)	<20	15.7%	Education	< High School	22.3%
	20-29	56.3%		High School	31.2%
	30+	32.1%		> High School	46.4%
Married	Yes	54.0%	Insurance	TennCare	30.4%
	No	46.0%		Insurance	46.3%
Residence	Urban	73.4%		None	23.3%
	Rural	26.6%			

Insurance status in all prevalence tables was defined based on women’s insurance status just prior to becoming pregnant. Women who reported being on Medicaid, TennCare, CoverTN and/or CoverKids (with or without other health insurance) were classified in the TennCare group. Women who reported having insurance but not being on Medicaid, TennCare, CoverTN or CoverKids were classified in the insurance group.

Body mass index (BMI), which was used in analyses of prepregnancy weight and pregnancy weight gain, was calculated using self-reported weight and height and the following formulas: BMI = [weight (kg) / height² (m²)] or [weight (lb) / height² (in²)]*703. A BMI of less than 18.5 is considered underweight, 18.5-24.9 is normal weight, 25 to 29.9 is overweight, and 30 and above is obese.

Adequacy of weight gain during pregnancy was determined using each respondent’s self-reported, prepregnancy weight and height, as well as information on birth plurality and pregnancy weight gain from birth certificate data. Women were grouped into three categories of weight gain – inadequate, adequate and excessive – based on the following weight gain recommendations:¹

Prepregnancy BMI:	Recommended Weight Gain (lbs)			
	Underweight	Normal Weight	Overweight	Obese
Singleton Pregnancy:	28-40	25-35	15-25	11-20
Twin Pregnancy:	--	37-54	31-50	25-42

Women who were underweight prior to pregnancy and who gave birth to twins were excluded from the analysis of weight gain because there was no recommended gain for this group. Women who gave birth to triplets or higher order multiples were excluded from all analyses because they were not included in sampling. These births are almost always low birthweight, although not as a result of the risk factors of interest to epidemiologic studies, and the mothers generally receive more than the usual level of prenatal care. Thus, these pregnancies are not likely to be representative of the general population.

Eligibility for the Supplemental Nutrition Program for Women, Infants and Children (WIC) was based on self-reported household income and family size during the 12 months prior to delivery, which were compared to income eligibility guidelines for reduced price meals (no more than 185% of the federal poverty level) for the period July 2009-June 2010.² Because PRAMS income categories do not exactly match federal poverty guidelines, in approximately 10% of cases eligibility based on these criteria was indeterminate. In such cases eligibility was instead determined based on the payment source for prenatal care and delivery. Women whose prenatal care and/or delivery were paid for by TennCare were categorized as eligible for WIC, while those whose care was paid for by insurance were categorized as ineligible. In total, 63.5% of women were determined to be eligible for WIC.

¹ Institute of Medicine and National Research Council. 2009. *Weight Gain during Pregnancy: Reexamining the Guidelines*. Washington, DC: The National Academic Press.

² Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Income Eligibility Guidelines. Federal Register Volume 74 Number 43 (March 6, 2009); pages 9780-9782.

PRAMS Staff and Steering Committee

The TN PRAMS Project staff for 2009 consisted of:

- David J. Law, PhD (PRAMS Project Director)
- Anthony H. Rico, MS (PRAMS Project Coordinator)
- Audrey M. Bauer, DVM, MPH (Epidemiologist/Analyst)
- Yinmei Li, MD, PhD (Epidemiologist)
- David Howard (PRAMS Data Manager)

The TN PRAMS Steering Committee for 2009 advised staff on the development and selection of state-specific questions and on the use, dissemination, and application of findings. Committee members included:

- David J. Law, PhD, Director of Research, Office of Policy, Planning and Assessment, TDH
- Teresa Hendricks, State Registrar, TDH
- Lori Ferranti, RN, MBA, MSN, PhD, Director, Office of Policy, Planning and Assessment, TDH
- Margaret Major, RD, MPA, Director, Women's Health and Genetics Section, TDH
- Peggy Lewis, Director, WIC, TDH
- Cheryl W. Major, RNC, BSN, Tennessee Perinatal Association
- Mark Gaylord, MD, University of Tennessee-Knoxville and Tennessee Pediatric Society
- Melanie Lutenbacher, PhD, APRN, Director, Nursing Science Programs, Vanderbilt University
- Cathy R. Taylor, MSN, RN, DrPH, Assistant Commissioner, Bureau of Health Services Administration, TDH
- Kimberlee Wyche-Etheridge, MD, MPH, Maternal Child Health Director, Nashville-Davidson County Metropolitan Health Department

2009
Tennessee
PRAMS
Results

Preconception Health

Prepregnancy Health Insurance

Prepregnancy Weight

Preconception Counseling

Folic Acid Awareness and Use

Pregnancy Intent

Preconception Birth Control Use

Preconception Health

Prepregnancy Health Insurance

TN PRAMS asks: During the month before you got pregnant with your new baby, were you covered by any of these health insurance plans? (Q2). Responses were classified into three groups: insurance, TennCare and none. [A detailed description of how insurance status was determined may be found in the data analysis overview on pages iii-iv.]

Background

In 2009, almost one-fifth of Tennessee women of childbearing age did not have any kind of health care coverage.¹ Among women without coverage, almost two-thirds were unable to see a doctor when needed because of cost and over one-half did not have a routine checkup within the past year.¹ Lack of health insurance may prevent women from accessing routine preventive care and family planning services, effectively managing chronic conditions, and entering prenatal care early; all of which could adversely affect maternal and child health outcomes.

Key Findings

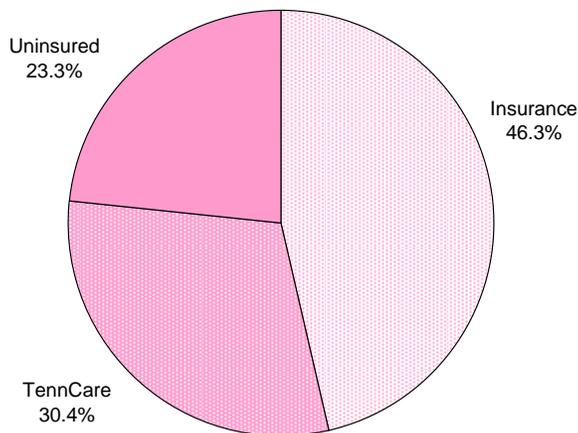
- Less than one-half (46.3%) of women reported having health insurance through their job, their husband's job or some other source in the month prior to pregnancy; approximately 30% were enrolled in TennCare or in another government insurance program; and 23% had no insurance.
- Women with 12 or fewer years of education and those with household incomes less than \$20,000 were more likely to be uninsured than those with higher levels of education or income.
- Women without prepregnancy insurance were less likely to get preconception counseling or early prenatal care compared to women who were insured.
- The majority of women without prepregnancy insurance cited TennCare as the payment source for their prenatal care and delivery.
- The health insurance status of some women changed between prepregnancy and delivery:
 - The majority of women who were uninsured in the month prior to pregnancy were enrolled in TennCare at the time of delivery.
 - Most women who were enrolled in TennCare prior to pregnancy continued to be enrolled at the time of delivery.
 - Approximately one-fifth of women who had insurance prior to pregnancy were enrolled in TennCare at the time of delivery.
 - Overall, less than one percent of women reported having no payment source for their delivery.

¹ 2009 Tennessee Behavioral Risk Factor Surveillance System (BRFSS); women aged 18-44 years

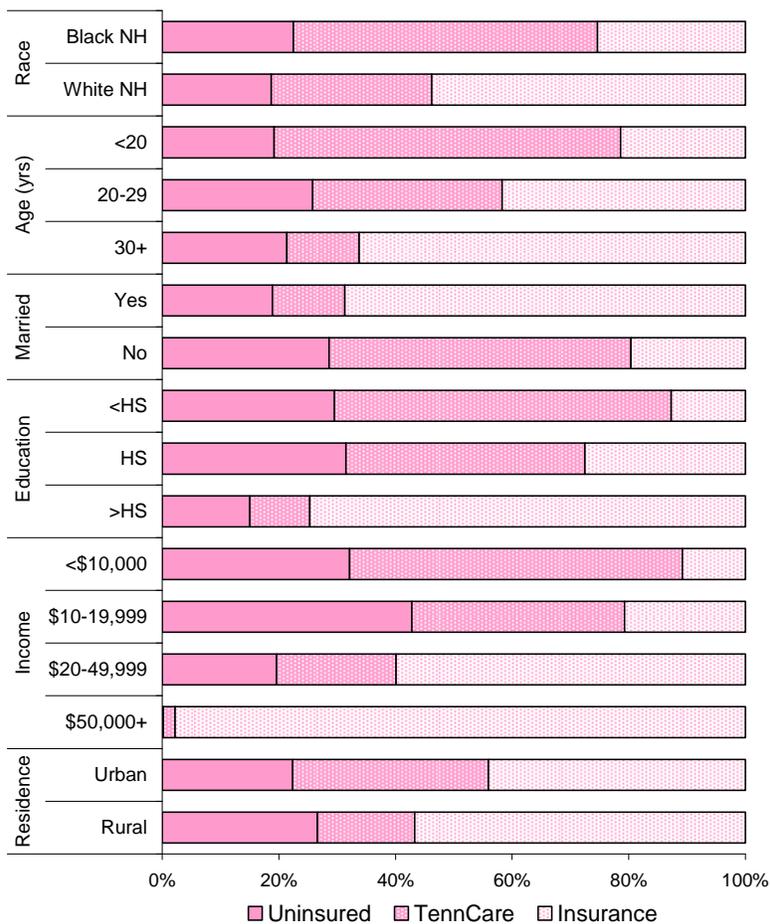
Preconception Health

Prepregnancy Health Insurance *cont.*

Prepregnancy Health Insurance Status



Prepregnancy Health Insurance Status by Demographic and Socioeconomic Characteristics

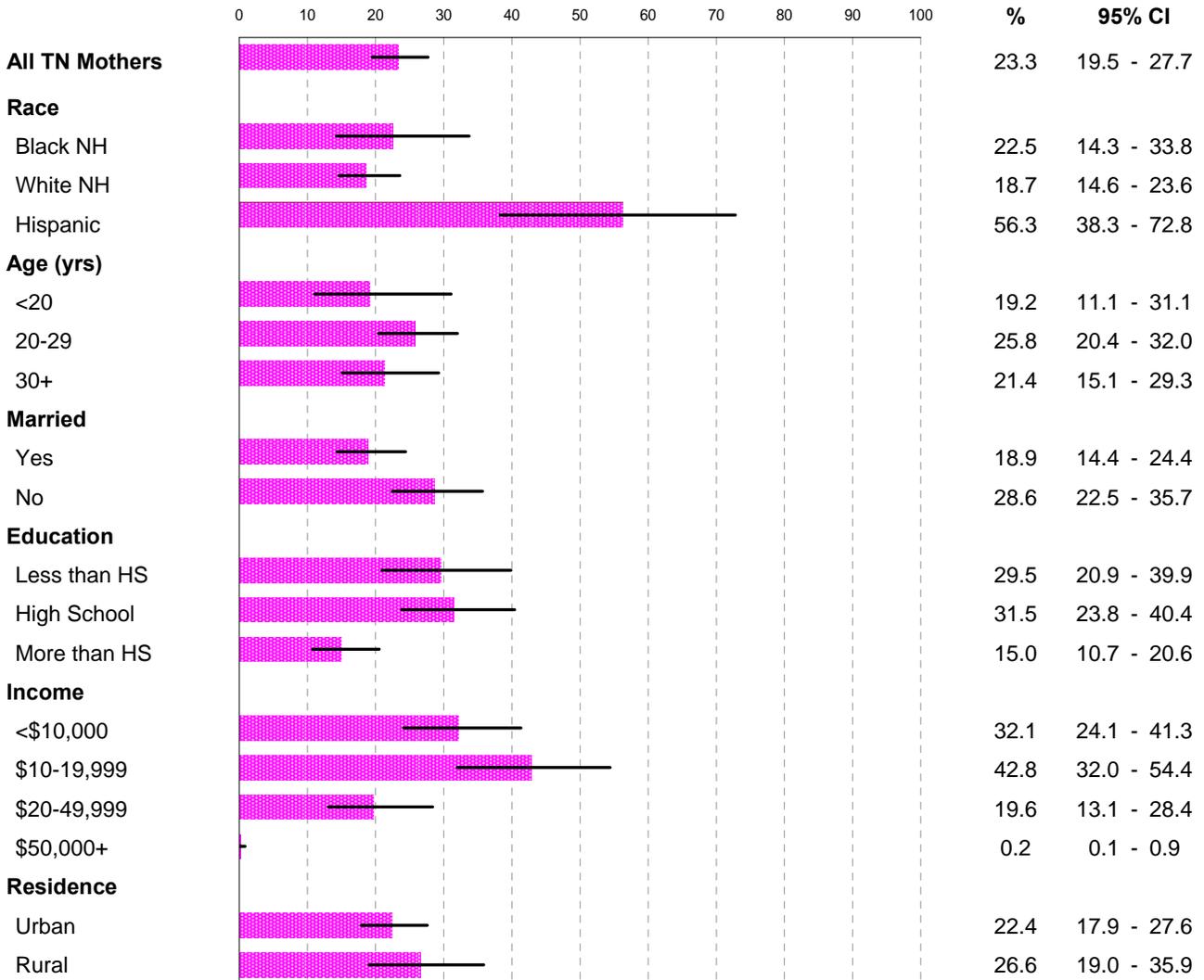


Preconception Health

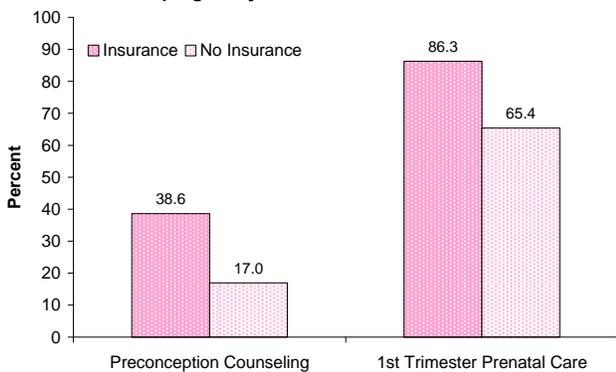
Prepregnancy Health Insurance *cont.*

Maternal
Characteristic

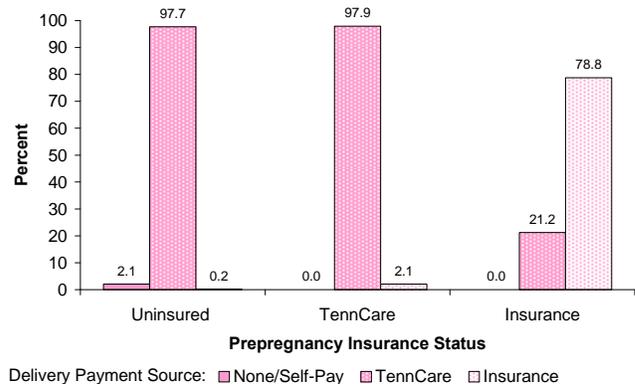
Percent of mothers with no pregnancy health insurance



Preconception Counseling and Prenatal Care by
Pregpregnancy Health Insurance Status



Delivery Payment Source by Pregpregnancy Insurance Status



Preconception Health

Prepregnancy Weight

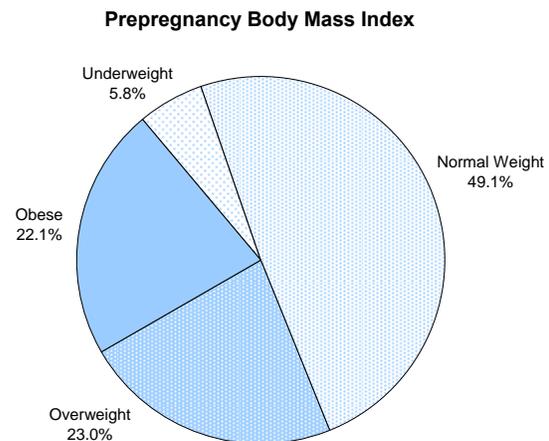
TN PRAMS asks: 1) Just before you got pregnant with your new baby, how much did you weigh? (Q4); and 2) How tall are you without shoes? (Q5). Responses were used to determine body mass index (BMI), a measure of body fat based on weight and height. A BMI less than 18.5 is considered underweight, 18.5-24.9 is normal weight, 25 to 29.9 is overweight, and 30 and above is obese. [A detailed description of BMI calculation may be found in the data analysis overview on pages iii-iv.]

Background

In 2009, approximately two-thirds of Tennessee women of childbearing age were overweight or obese.¹ This has important implications for maternal and child health, especially given the fact that approximately half of all pregnancies are unplanned. Maternal obesity is associated with many pregnancy complications, including cesarean delivery, macrosomia, large for gestational age infants, pregnancy-induced high blood pressure, preeclampsia, gestational diabetes mellitus, a higher incidence of certain birth defects, and difficulty initiating and sustaining breastfeeding.^{2,3}

Key Findings

- Approximately 45% of women were overweight or obese at the time they became pregnant.
- There were no statistically significant differences in the prevalence of prepregnancy overweight and obesity across demographic and socioeconomic subgroups.
- Approximately 41% of obese women had changed their eating habits in the twelve months prior to getting pregnant in order to lose weight, but just 26% reported exercising at least three days a week.
 - Obese women were more likely than normal weight women to report dieting, but less likely to report exercising regularly.
- Although a higher percentage of obese women delivered by cesarean section compared to normal weight women, this difference was not statistically significant.
- The prevalence of both pregnancy-induced high blood pressure (including preeclampsia) and of gestational diabetes increased with increasing BMI.
 - Women who were obese were over twice as likely as normal weight women to report pregnancy-induced high blood pressure, and almost four times as likely to report gestational diabetes.
- Women who were obese were approximately 20% less likely to initiate breastfeeding compared to normal weight women.



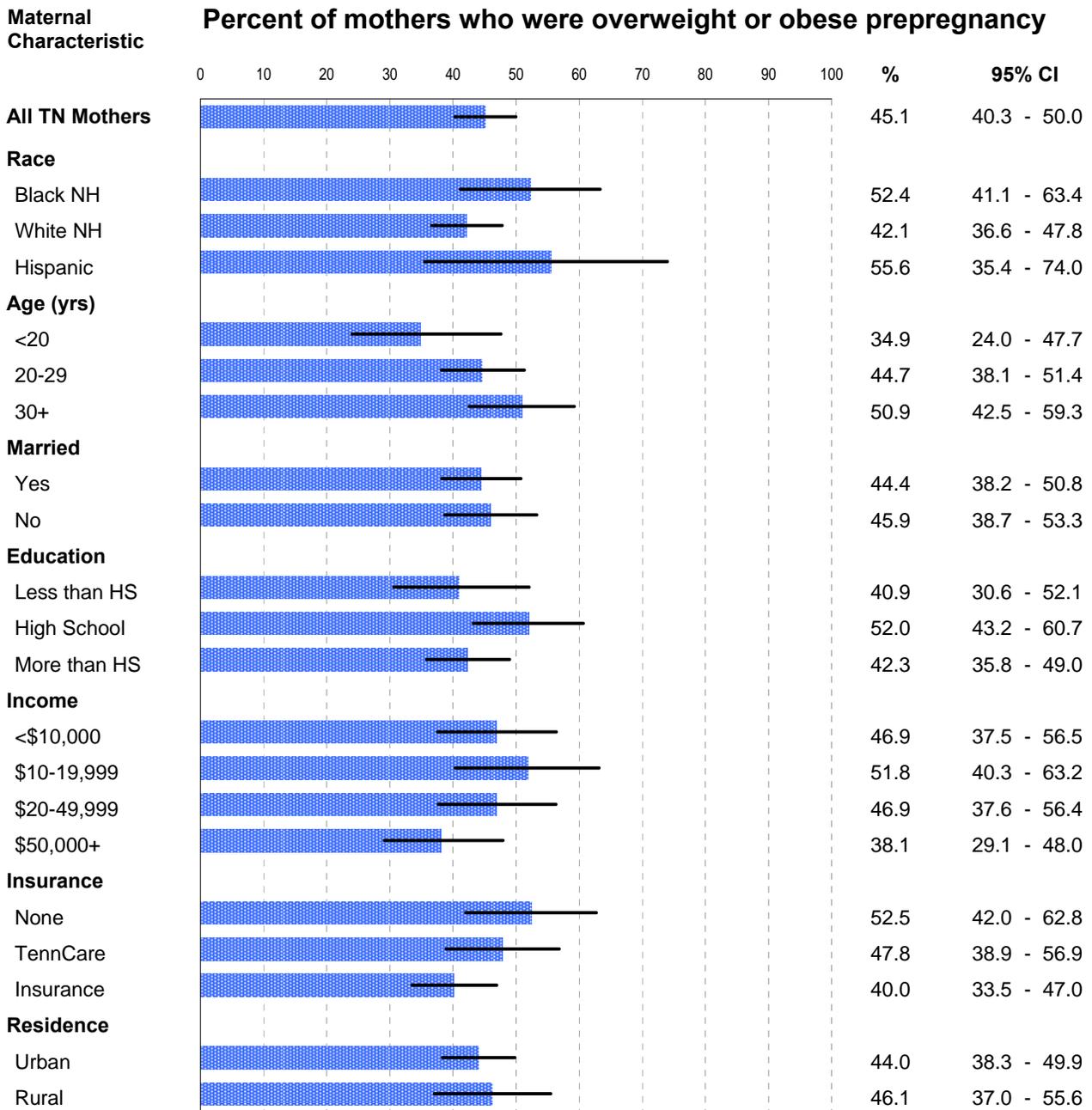
¹ 2009 Tennessee Behavioral Risk Factor Surveillance System (BRFSS); women aged 18-44 years

² Centers for Disease Control and Prevention. Maternal and Infant Health Research: Pregnancy Complications. Accessed April 2011 at <http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PregComplications.htm#obesity>.

³ Poston L, et al. Obesity in Pregnancy: Implications for the Mother and Lifelong Health of the Child. A Consensus Statement. *Pediatric Research* 2011; 69(2): 175-180.

Preconception Health

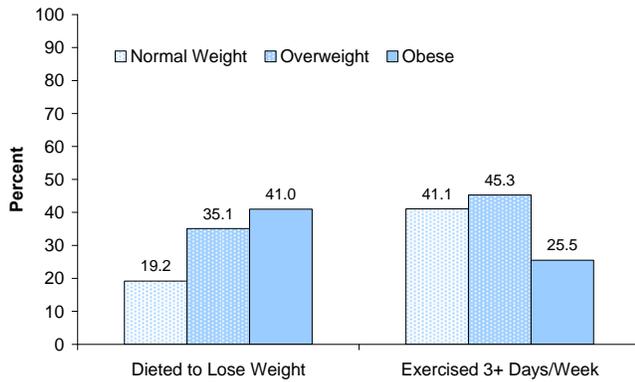
Prepregnancy Weight *cont.*



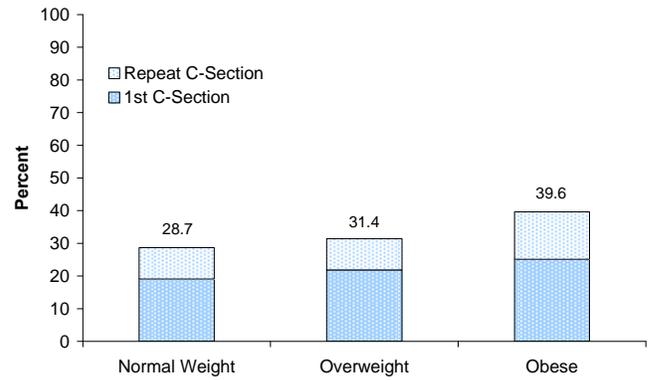
Preconception Health

Prepregnancy Weight *cont.*

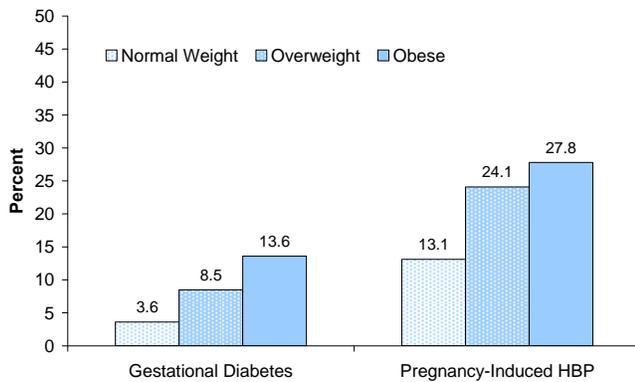
Dieting and Exercise by Prepregnancy BMI



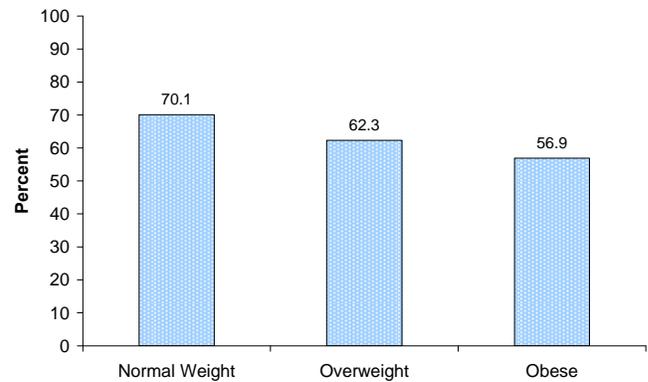
C-Section Prevalence by Prepregnancy BMI



Diabetes and High Blood Pressure Prevalence During Pregnancy by Prepregnancy BMI



Initiation of Breastfeeding by Prepregnancy BMI



Preconception Health

Preconception Counseling

TN PRAMS asks: Before you got pregnant with your new baby, did a doctor, nurse or other health care worker talk with you about how to prepare for a healthy pregnancy and baby? (Q8).

Background

Preconception care is the health care a woman receives before or between pregnancies. The purpose is to provide health education, screening and interventions to women of childbearing age in order to reduce risk factors that might adversely affect future pregnancies.¹ Certain behaviors and medical conditions can adversely affect a developing fetus, especially during the first few weeks after conception when a woman may not yet know she's pregnant.¹ Preconception counseling and care offer an opportunity for all women of childbearing age to address these behaviors and conditions, improve their overall health and prepare for a healthy baby if and when they're ready.¹

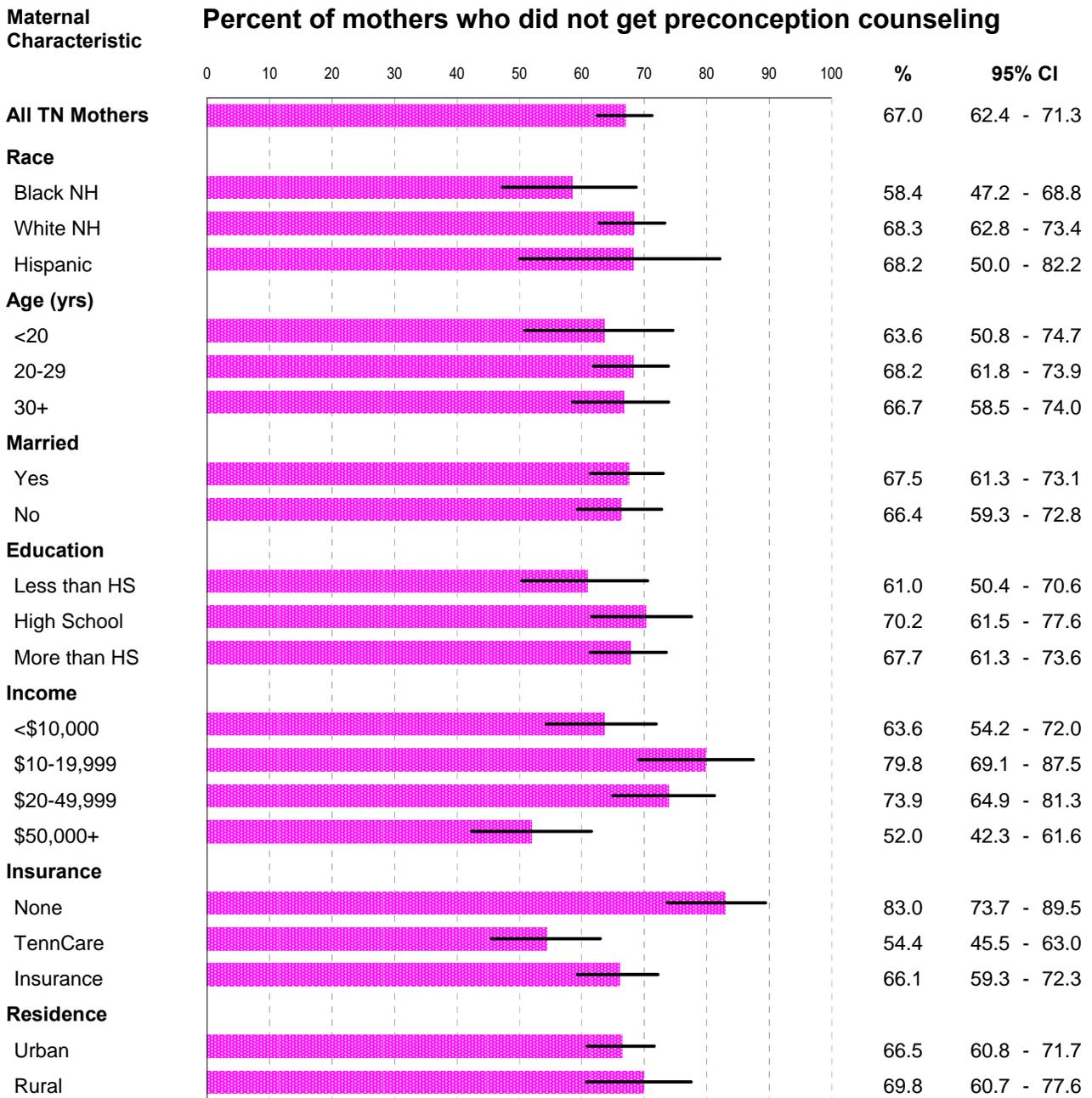
Key Findings

- Over two-thirds (67.0%) of mothers did not receive preconception counseling.
- Women who were uninsured just prior to getting pregnant were less likely to receive preconception counseling than those with health insurance or those enrolled in TennCare.
- Women with unplanned pregnancies were less likely to receive preconception counseling than those with planned pregnancies. However, even among those with planned pregnancies, over one-half of women did not receive counseling.
- Almost all women (96.4%) had at least one of the following modifiable risk factors and could therefore have benefited from preconception counseling:
 - 51% had not had their teeth cleaned by a dental professional in the 12 months prior to pregnancy.
 - 34% smoked cigarettes in the 3 months prior to pregnancy.
 - 48% drank alcohol in the 3 months prior to pregnancy.
 - 74% did not take a multivitamin, prenatal vitamin or folic acid in the month prior to pregnancy.
 - 51% were underweight, overweight or obese at the time they became pregnant.
 - 50% did not plan their pregnancy.
- Compared to women who received preconception counseling, those who did not receive counseling were less likely to have had their teeth cleaned, taken a daily vitamin or planned their pregnancy, but were more likely to have drunk alcohol.

¹ Trust for America's Health. *Healthy Women. Healthy Babies*. Accessed May 2011 at <http://www.healthyamericans.org>.

Preconception Health

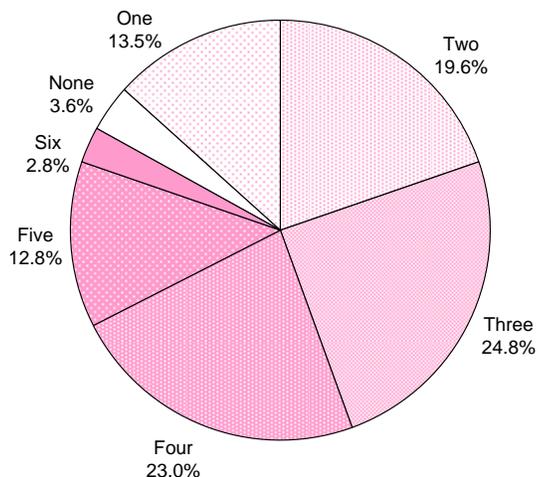
Preconception Counseling *cont.*



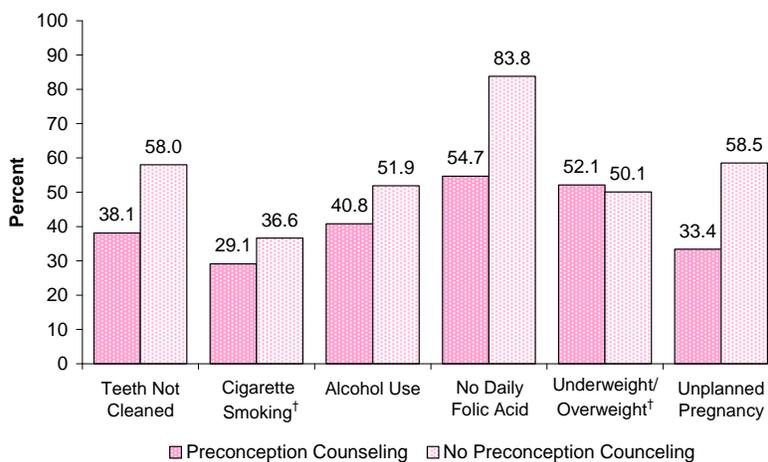
Preconception Health

Preconception Counseling *cont.*

Number of Prepregnancy Risk Factors*



Prevalence of Prepregnancy Risk Factors by Counseling Status



* See chart below entitled 'Prevalence of Prepregnancy Risk Factors' for specific risk factors included in analysis.

† Difference was not statistically significant.

Preconception Health

Folic Acid Awareness and Use

TN PRAMS asks: 1) Have you ever heard or read that taking a vitamin with folic acid can help prevent some birth defects (Q28); 2) Have you ever heard about folic acid from any of the following [sources]? (Q29); and 3) During the month before you got pregnant with your new baby, how many times a week did you take a multivitamin, a prenatal vitamin or a folic acid vitamin? (Q3).

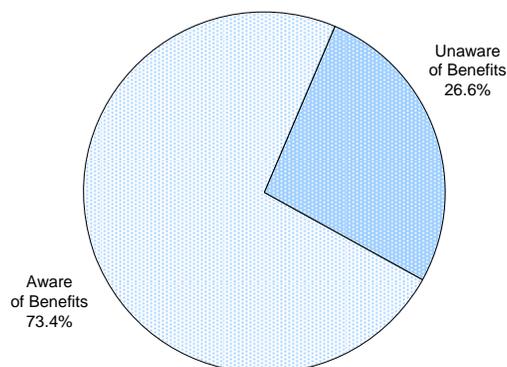
Background

Between 2004 and 2008, 283 infants in Tennessee were born with neural tube defects, a type of birth defect affecting the brain and spinal cord.¹ Folic acid is a form of B vitamin that can help prevent neural tube defects.² However, folic acid only works if taken before getting pregnant and during the first few weeks of pregnancy, often before a woman knows she is pregnant.² Since approximately one-half of all pregnancies are unplanned, it is recommended that all women of childbearing age (even if they're not trying to get pregnant) get at least 400 micrograms of folic acid every day.²

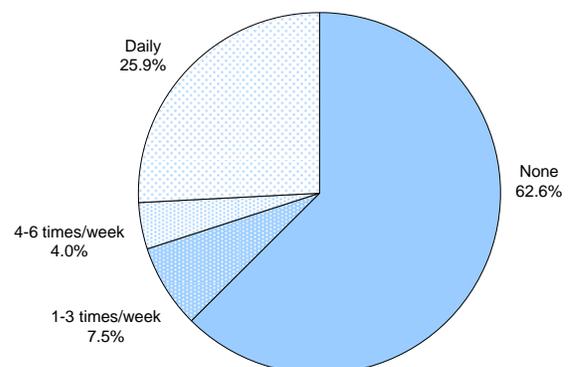
Key Findings

- Although 73% of mothers said they were aware of the benefits of folic acid, just 26% reported taking a daily multivitamin, prenatal vitamin or folic acid vitamin in the month prior to pregnancy.*
- Almost three-quarters (74.1%) of women did not take daily folic acid prior to pregnancy.
- Women who were aware of the benefits of folic acid were more likely to take daily folic acid than those who were unaware of its benefits.
- Among women who were aware of the benefits of folic acid, the most frequently reported source of information was a doctor, nurse or other health care worker.
- In addition to the sources of folic acid information listed in Question #29, other reported sources included the internet, March of Dimes, and through school and/or work (e.g. nursing, medicine).
- Compared to women with intended pregnancies, those with unintended pregnancies were less likely to take daily folic acid (see chart entitled 'No Daily Folic Acid by Pregnancy Intent' on page 18).
- There was no statistically significant difference in the percentage of women who were aware of the benefits of folic acid among those with versus those without preconception counseling. However, women who received counseling were more likely to take folic acid daily.

Folic Acid Awareness



Frequency of Folic Acid Intake in Month Prior To Pregnancy



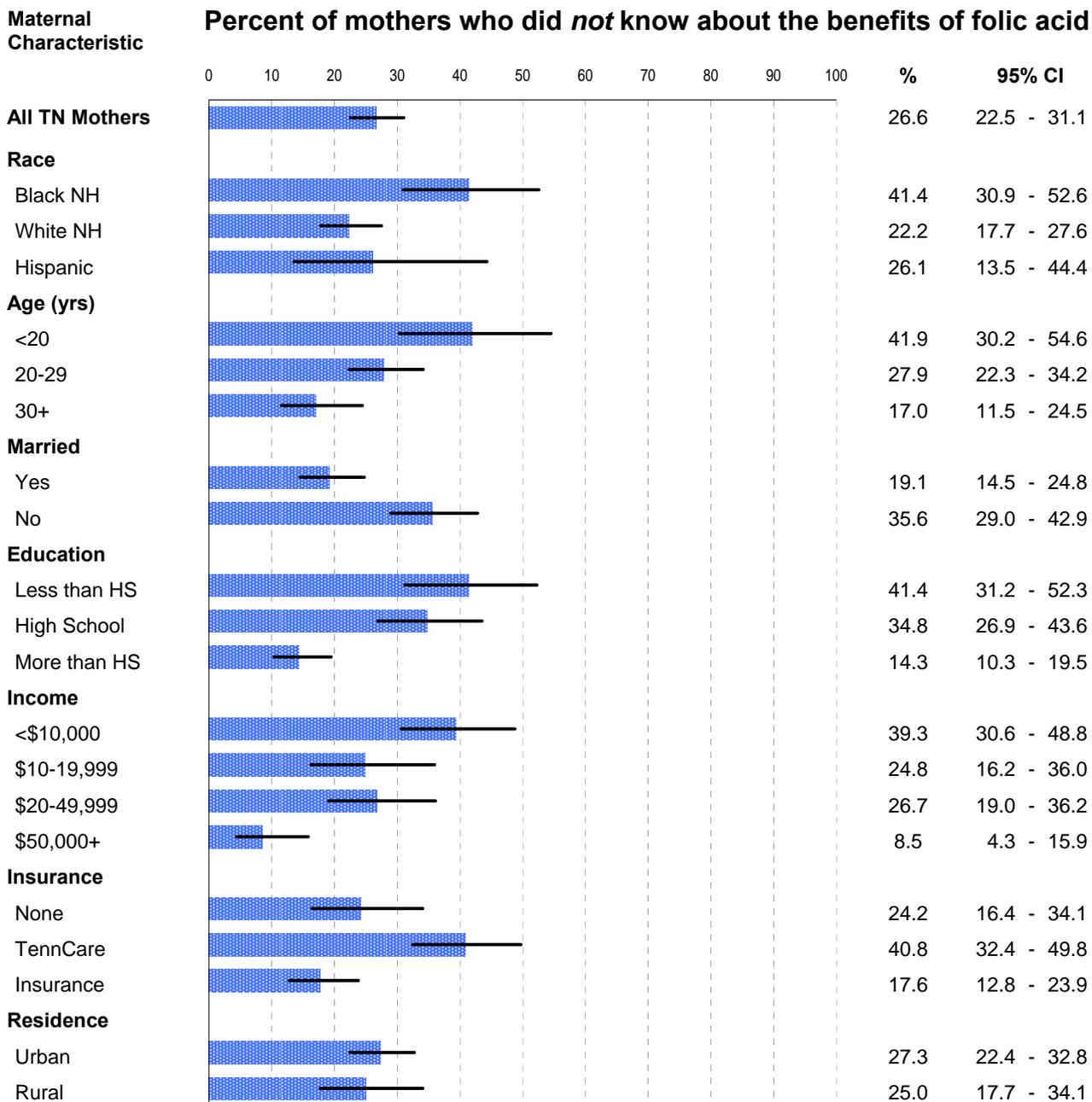
¹ Tennessee Birth Defects Registry; includes anencephaly, spina bifida, and encephalocele

² March of Dimes. Accessed May 2011 at <http://www.marchofdimes.com/pregnancy/folicacid.html>.

* It was not possible to determine when women became aware of the benefits of folic acid (i.e. before, during or after pregnancy).

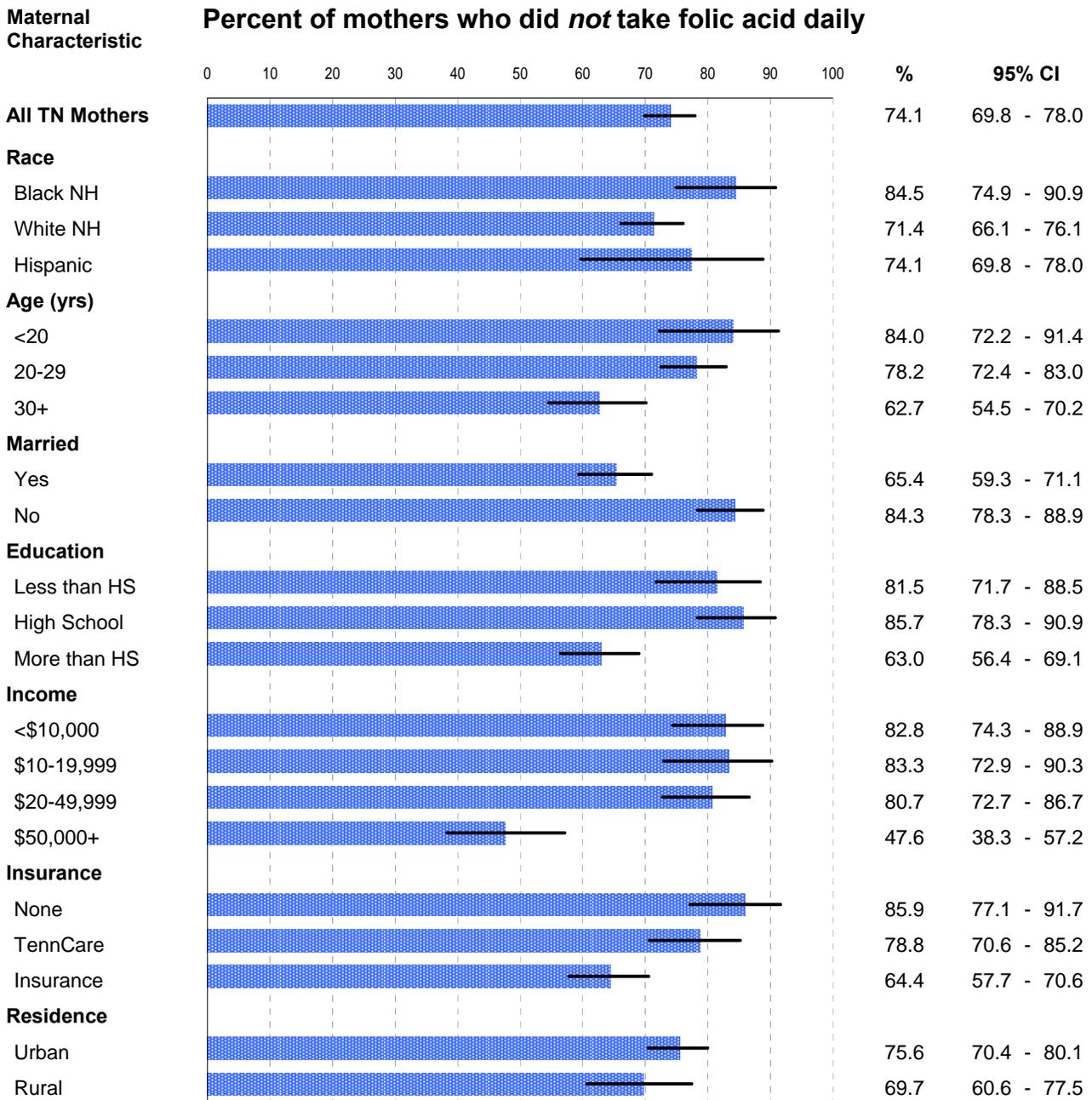
Preconception Health

Folic Acid Awareness and Use *cont.*



Preconception Health

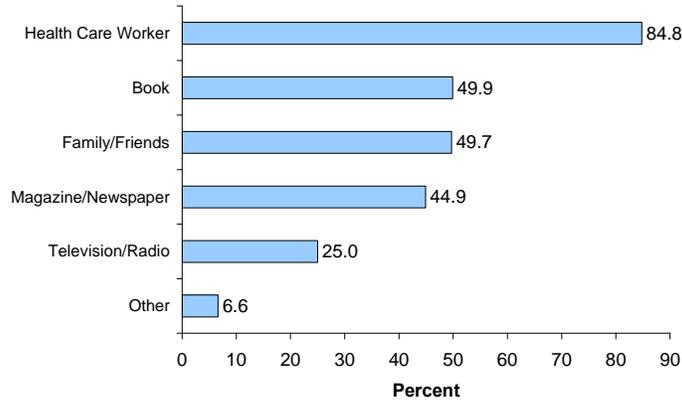
Folic Acid Awareness and Use *cont.*



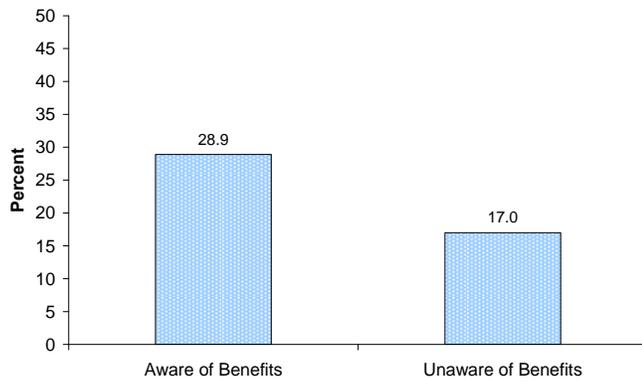
Preconception Health

Folic Acid Awareness and Use *cont.*

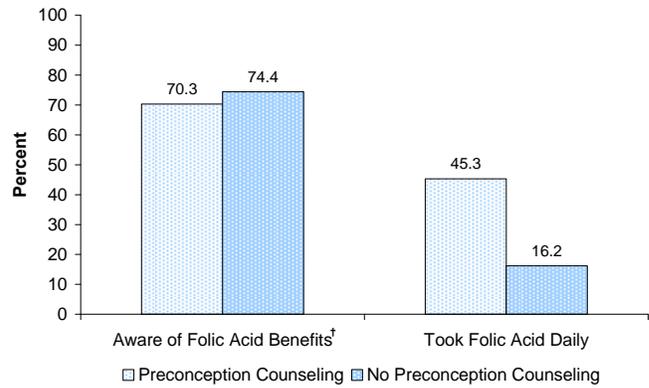
Sources of Folic Acid Information*



Daily Folic Acid Intake by Folic Acid Awareness



Folic Acid Awareness and Intake by Preconception Counseling



* Women may have reported more than one source of folic acid information. Therefore percentages do not sum to 100%.

[†] Difference was not statistically significant.

Preconception Health

Pregnancy Intent

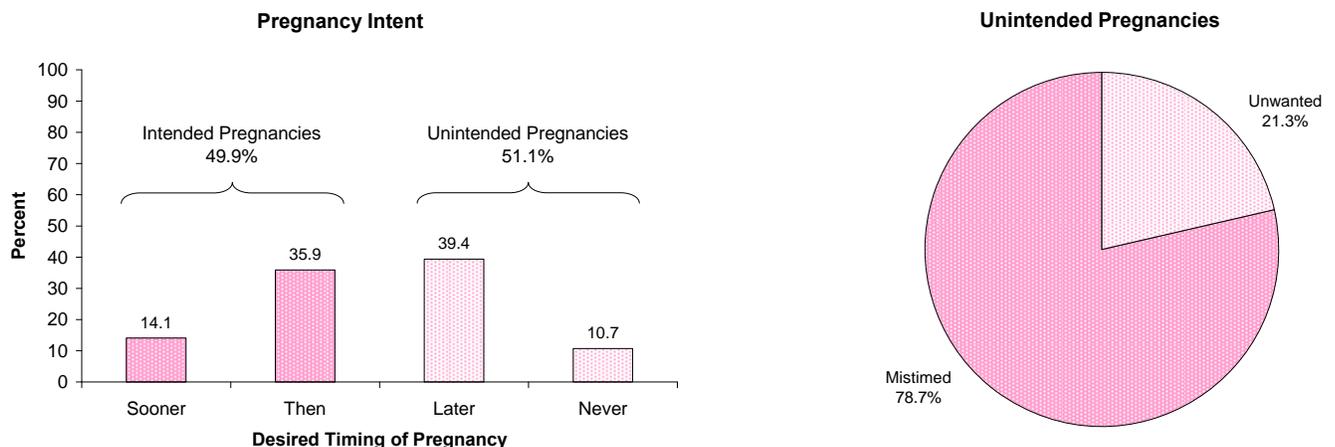
TN PRAMS asks: Thinking back to just before you got pregnant with your new baby, how did you feel about becoming pregnant? (Q14). An intended (i.e. planned) pregnancy was one in which the mother answered that she wanted to be pregnant then or sooner. Women who wanted to be pregnant later (mistimed pregnancy) or not at all (unwanted pregnancy) were classified as having an unintended pregnancy.

Background

Unintended pregnancies are associated with a range of behaviors that can adversely affect maternal and child health.¹ It is therefore recommended that everyone, men and women, have a reproductive life plan (RLP) based on their own personal values and resources.² An RLP is a set of goals about having or not having children and how to achieve them.³ It details when and under what conditions someone wants to get pregnant, the number and spacing of children, and what to do to prevent pregnancy until ready. RLPs can increase the number of planned pregnancies and encourage individuals to address behaviors before conception, thus reducing the risk for adverse outcomes for both mothers and infants.¹

Key Findings

- Approximately one-half (50.1%) of mothers said their pregnancies were unintended.
- Among unintended pregnancies, 79% were mistimed and 21% were unwanted.
- Unintended pregnancies were more common among black than among white non-Hispanics.
- Unintended pregnancies increased with decreasing age.
- Compared to women with intended pregnancies, those with unintended pregnancies were more likely to:
 - receive no preconception counseling,
 - have a short interpregnancy interval (less than 18 months),
 - receive late or no prenatal care, and
 - not take daily folic acid in the month prior to pregnancy.
- However, even among women with *intended* pregnancies, over one-half did not receive preconception counseling or take daily folic acid in the month prior to pregnancy.



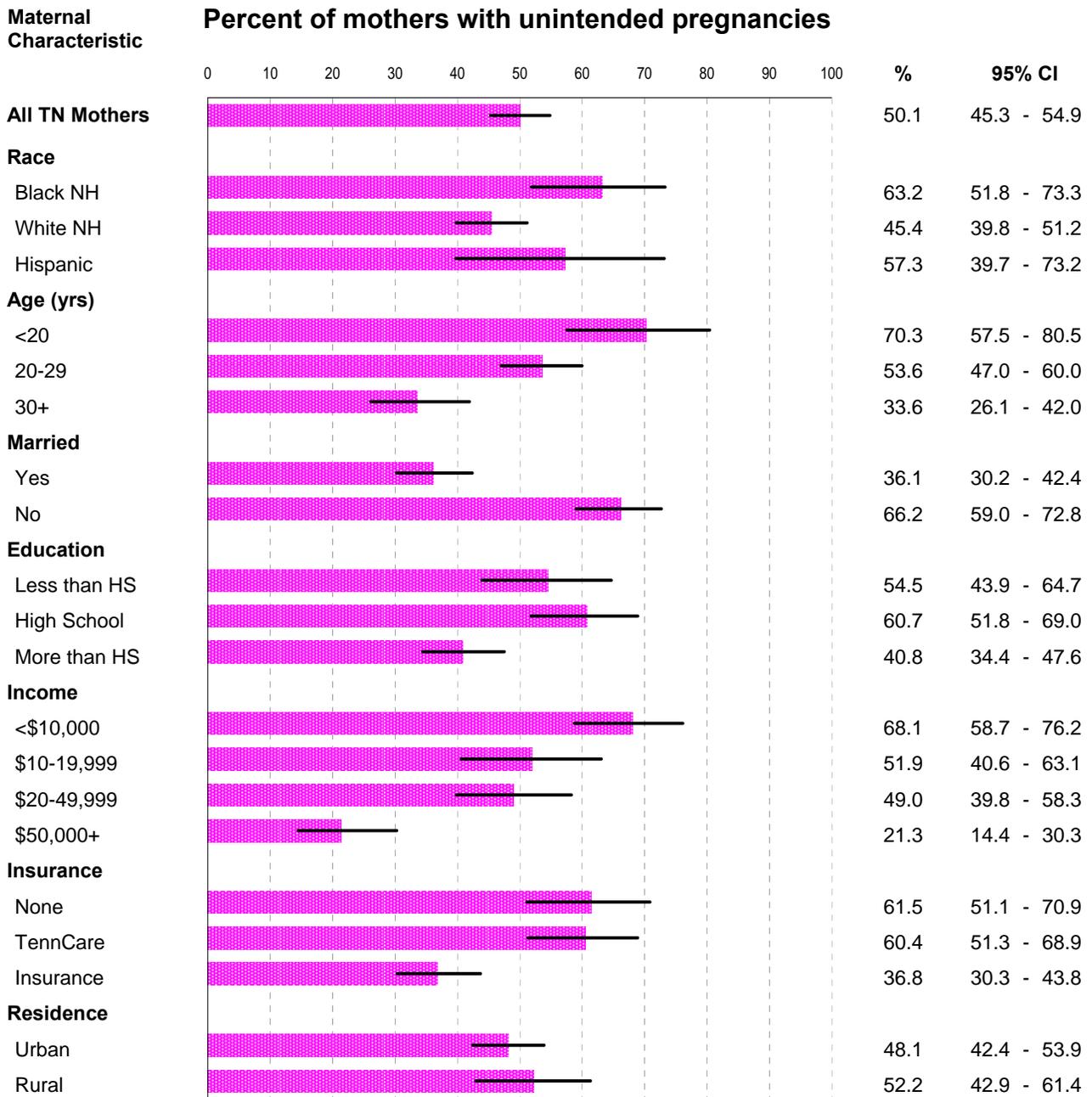
¹ Williams L, Morrow B, Shulman H, Stephens R, D'Angelo D, Fowler CI. PRAMS 2002 Surveillance Report. Atlanta, GA: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2006.

² Centers for Disease Control and Prevention. Recommendations to Improve Preconception Health and Health Care. *MMWR* 2006; 55(RR-6).

³ Centers for Disease Control and Prevention. *Preconception Care Questions and Answers*. Accessed May 2011 at <http://www.cdc.gov/ncbddd/preconception/QandA.htm>.

Preconception Health

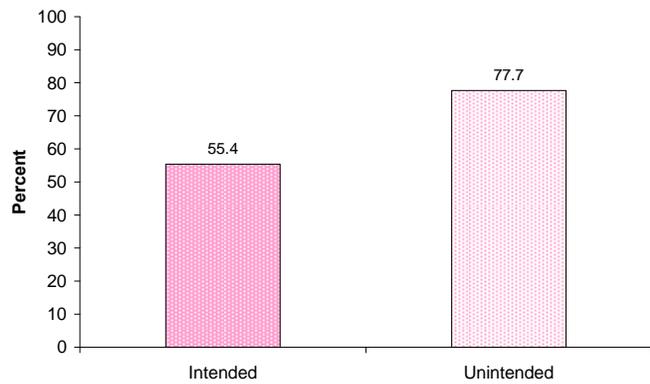
Pregnancy Intent *cont.*



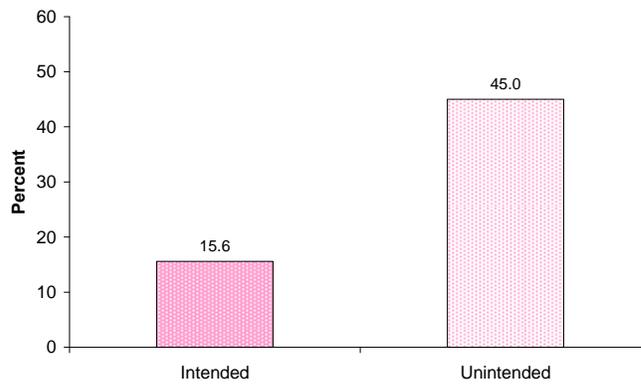
Preconception Health

Pregnancy Intent *cont.*

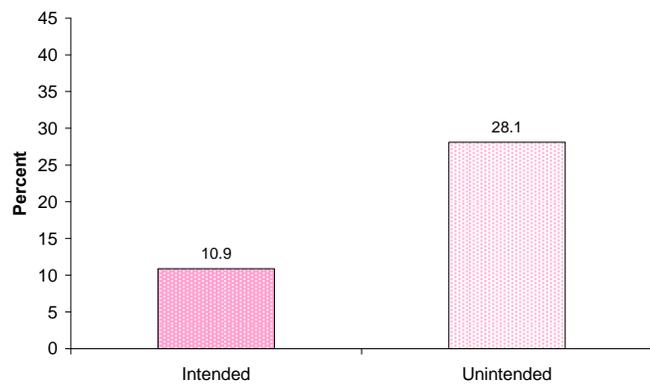
No Preconception Counseling by Pregnancy Intent



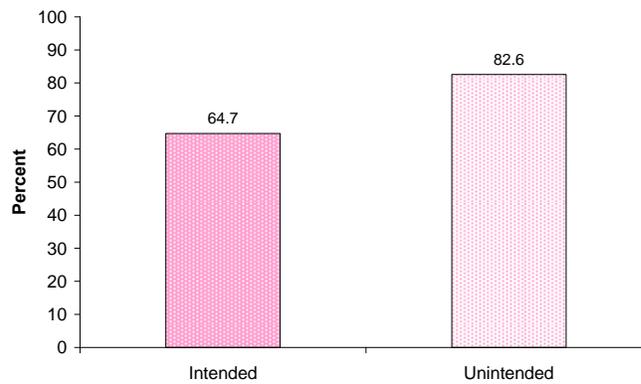
Short Interpregnancy Interval by Pregnancy Intent



Late or No Prenatal Care by Pregnancy Intent



No Daily Folic Acid by Pregnancy Intent



Preconception Health

Preconception Birth Control Use

TN PRAMS asks: *When you got pregnant with your new baby, were you or your husband or partner doing anything to keep from getting pregnant? (Q17). Additional questions ask about reasons for not using birth control (Q18) and birth control methods (Q19).*

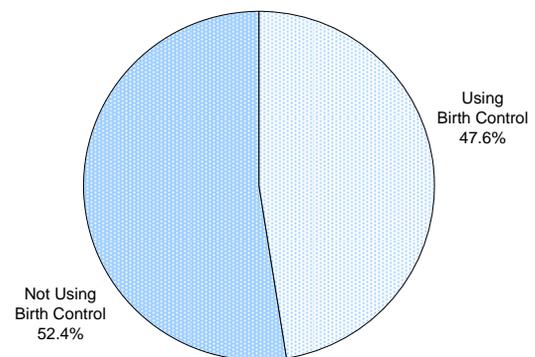
Background

Unintended pregnancy can result from the failure to use birth control, inconsistent or improper use of effective birth control, use of less effective birth control, or in rare cases, failure of highly effective birth control.¹ Failure to use contraception is the major cause of unintended pregnancy in the United States – approximately one-half of all unintended pregnancies are among women who did not use birth control.^{1,2} It is estimated that the overall rate of unintended pregnancy could be cut in half if these women were to use highly effective contraceptive methods.²

Key Findings

- Over one-half (52.4%) of women who said they were *not* trying to get pregnant were also not using birth control at the time they became pregnant.*
- The percentage of women not using birth control was similar across demographic and socioeconomic subgroups.
- Among women who were not using birth control, the most frequently reported reason for not doing so was not minding getting pregnant.
- Less than 10% of women reported having problems getting birth control when needed.
- Among women who were using birth control, the most frequently used method at the time of pregnancy was condoms.

Birth Control Use Among Women Not Trying to Get Pregnant*



Effectiveness of Birth Control Methods

More Effective	Annual Pregnancies per 100 Women	Methods
↑	< 1	Vasectomy, female sterilization, IUD, implant
	2-9	Breastfeeding, shot, pill, ring, patch
	15-24	Diaphragm, condom, withdrawal, sponge, cervical cap
	Less Effective	25

Source: Planned Parenthood (accessed May 2011 at <http://www.plannedparenthood.org/health-topics/birth-control/birth-control-effectiveness-chart-22710.htm>)

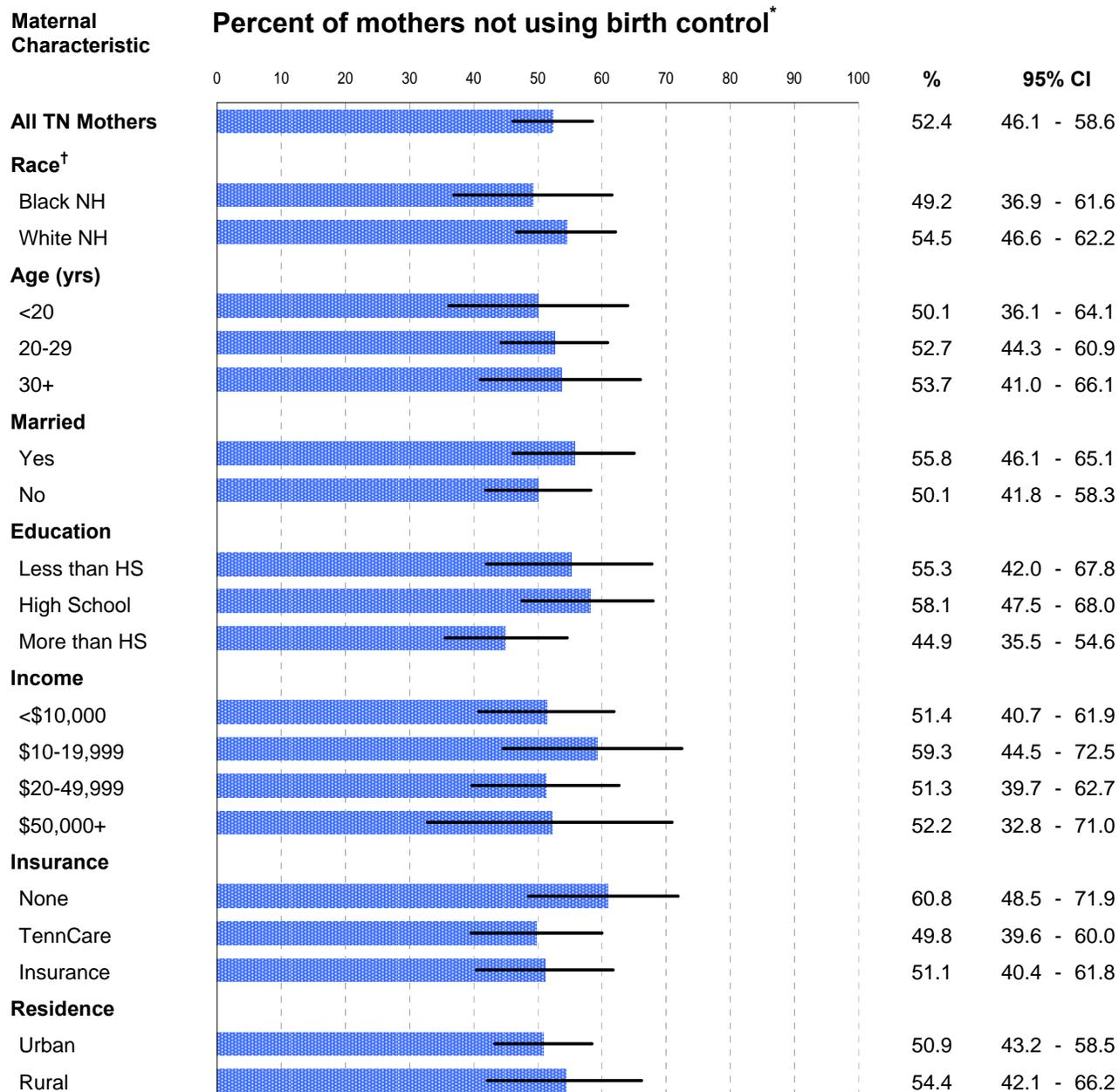
¹ Williams L, Morrow B, Shulman H, Stephens R, D'Angelo D, Fowler CI. PRAMS 2002 Surveillance Report. Atlanta, GA: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2006.

² Centers for Disease Control and Prevention. *PRAMS and...Unintended Pregnancy*. Accessed May 2011 at <http://www.cdc.gov/PRAMS/PDFs/PRAMSUnintendPreg.pdf>.

* Analysis limited to women not trying to get pregnant, regardless of pregnancy intent.

Preconception Health

Preconception Birth Control Use *cont.*



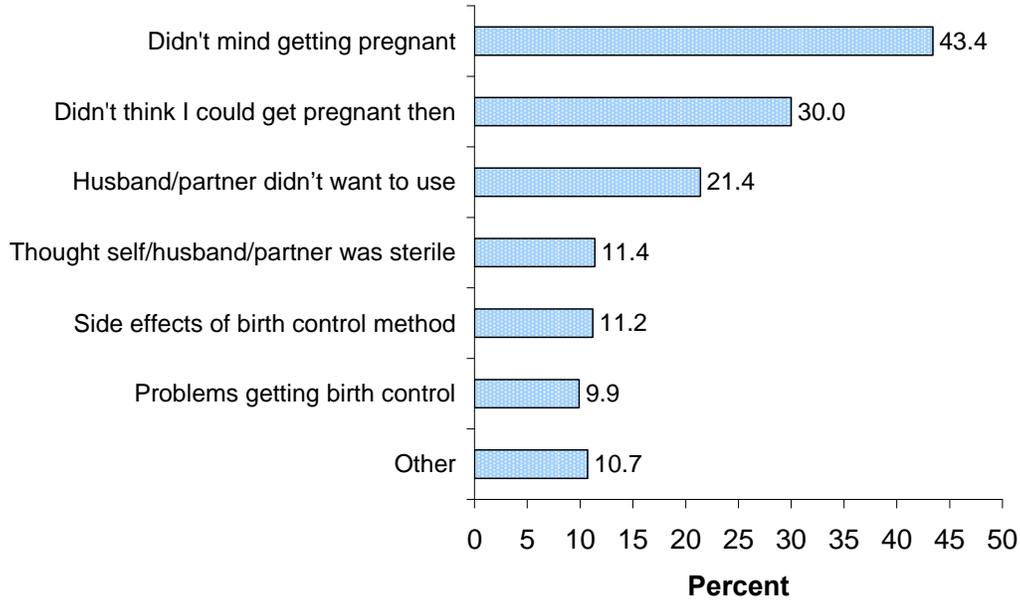
* Analysis limited to women not trying to get pregnant, regardless of pregnancy intent.

[†] Data for Hispanic women are not presented due to sample size less than 30.

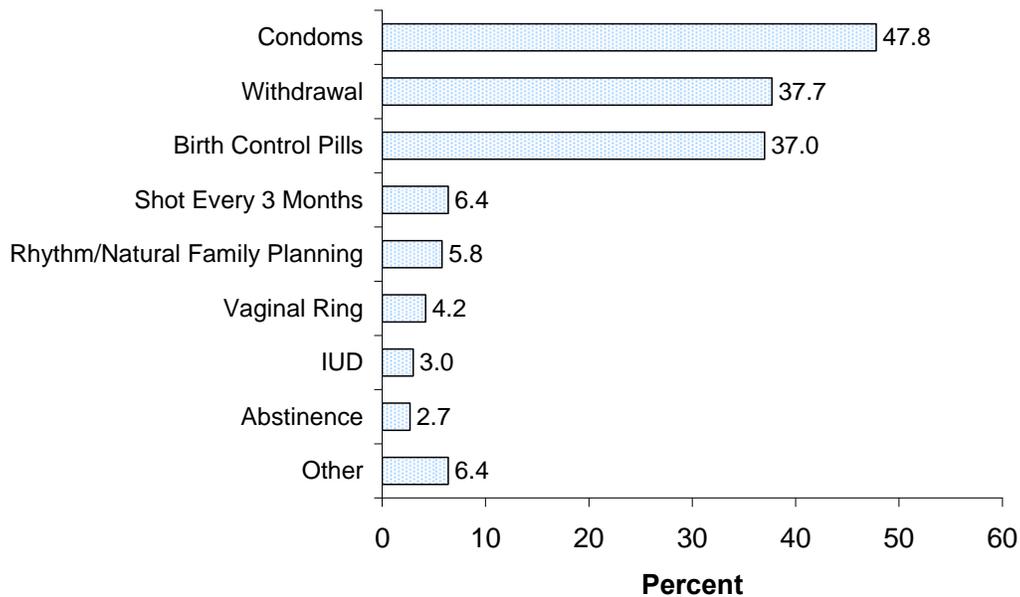
Preconception Health

Preconception Birth Control Use *cont.*

Reason for Not Using Birth Control*



Birth Control Method at Time of Pregnancy*†



* Women may have reported more than one reason for not using birth control or birth control method. Therefore, percentages do not sum to 100%.

† The 'other' category includes contraceptive patch, emergency contraception, vaginal film/foam and/or other (unspecified) method. Less than 2% of women reported using each of these birth control methods. No women reported using tubal ligation, vasectomy, contraceptive implant, or diaphragm.

Prenatal Health

Prenatal Care

HIV Testing

Oral Health

Pregnancy Weight Gain

Gestational Diabetes

Prenatal Health

Prenatal Care

TN PRAMS asks: How many weeks or months pregnant were you when you had your first visit for prenatal care? (Q21). Women who initiated care after the first trimester of pregnancy (after 12 weeks/3 months or later) were classified as receiving late prenatal care. Those who initiated care within the first trimester were classified as receiving early prenatal care. Additional questions ask about desired timing of (Q22), barriers to (Q23) and content of (Q25) prenatal care.

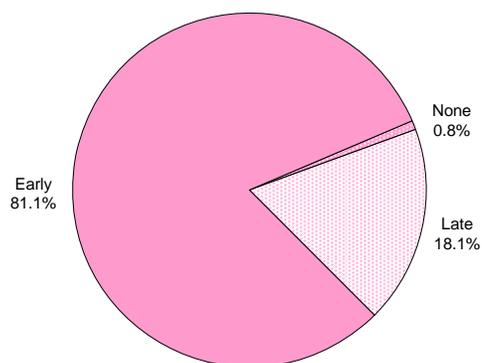
Background

Prenatal care is the health care a woman receives while she is pregnant. Early and regular prenatal care visits allow health care providers to follow the progress of a baby's development; identify potential problems and either prevent them or treat them early; and provide education and counseling on pregnancy and childbirth.¹ Inadequate prenatal care is associated with increased risk of low birthweight and premature birth, and of neonatal, infant and maternal mortality.² It is therefore important that women schedule their first prenatal appointment as soon as they think they may be pregnant.¹

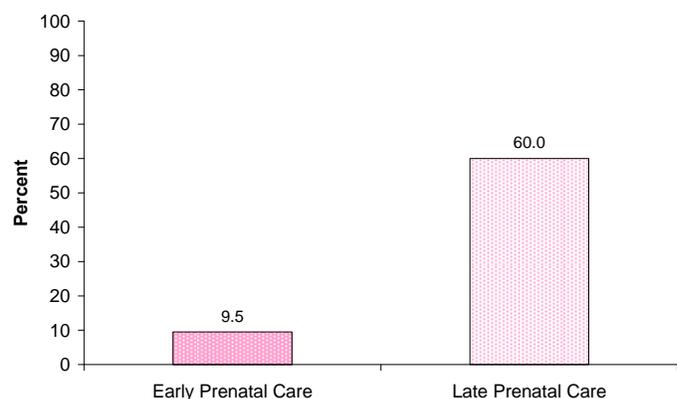
Key Findings

- Almost one-fifth of women (18.9%) received late or no prenatal care.
- Black non-Hispanics were more likely than white non-Hispanics to receive late or no care.
- Women with unintended pregnancies were more likely to receive late or no care than those with intended pregnancies (28.1% vs. 10.9%, respectively).
- Women who recognized their pregnancy late (after the first 8 weeks of gestation) were more likely to receive late or no care than those who recognized their pregnancy earlier (53.9% vs. 13.6%, respectively).
- Among women who received late prenatal care, almost two-thirds (60.0%) reported they did not get care as early in their pregnancy as they wanted.
- Almost all women (98.3%) who did not get prenatal care or did not get it as early as they wanted reported at least one barrier to getting care.
- The most frequently reported barrier to receiving prenatal care was lack of money or insurance.
- The most frequently discussed topics during prenatal care were medicine safety and birth defects screening; the least frequently discussed topics were physical abuse and seat belt use.
- Women who received late or no prenatal care were more likely to deliver a low birthweight infant than those who received timely care (12.4% vs. 7.3%, respectively).

Initiation of Prenatal Care



Did Not Receive Prenatal Care as Early as Wanted by Timing of Care

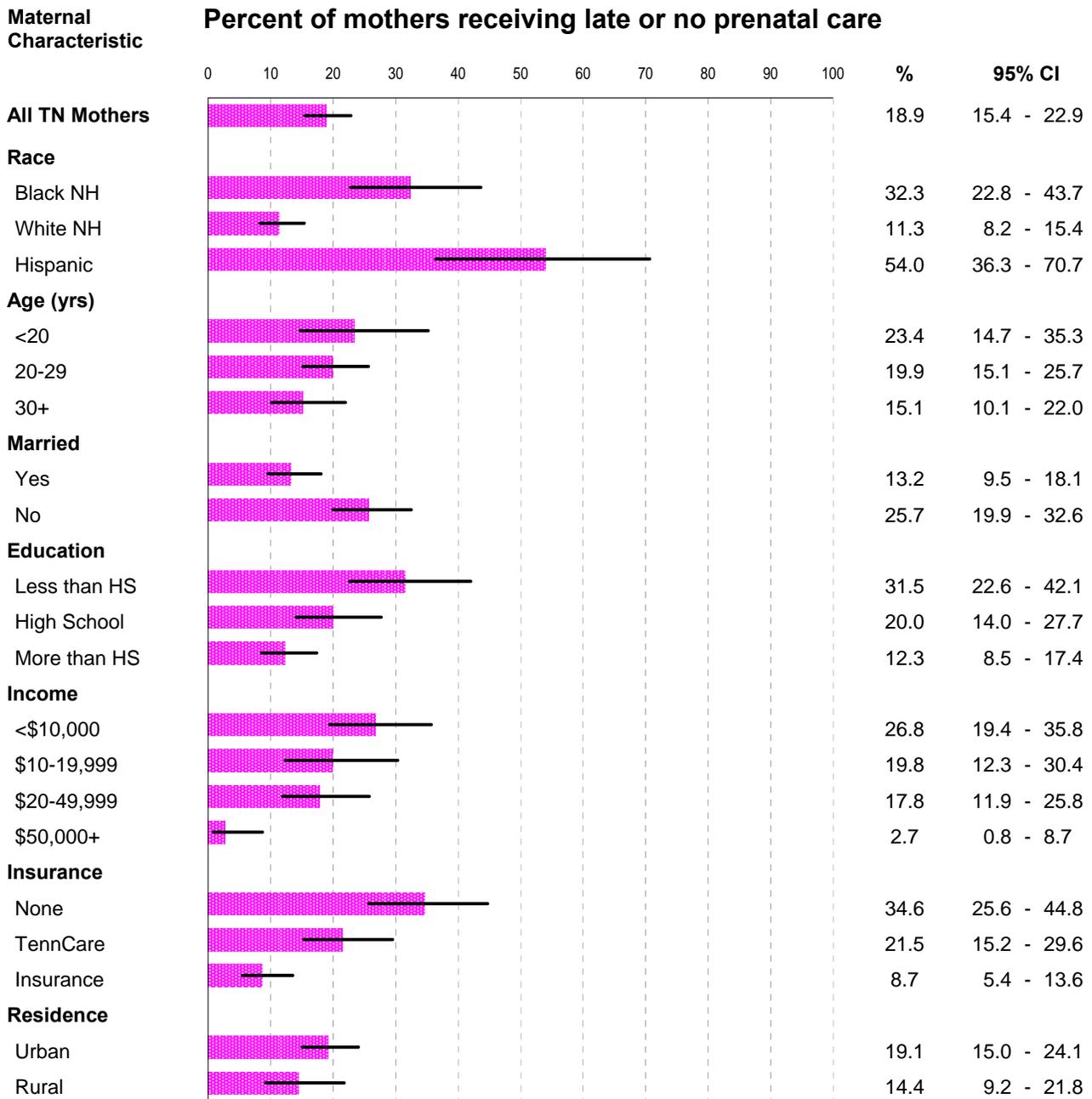


¹ WebMD. *Women's Health: Your First Prenatal Doctor's Visit*. Accessed May 2011 at <http://women.webmd.com/first-doctor-visit>.

² Wilcox LS, Marks JS. (1994). *From Data to Action: CDC's Public Health Surveillance for Women, Infants, and Children*. CDC maternal and child health monograph. Atlanta, GA: Centers for Disease Control and Prevention.

Prenatal Health

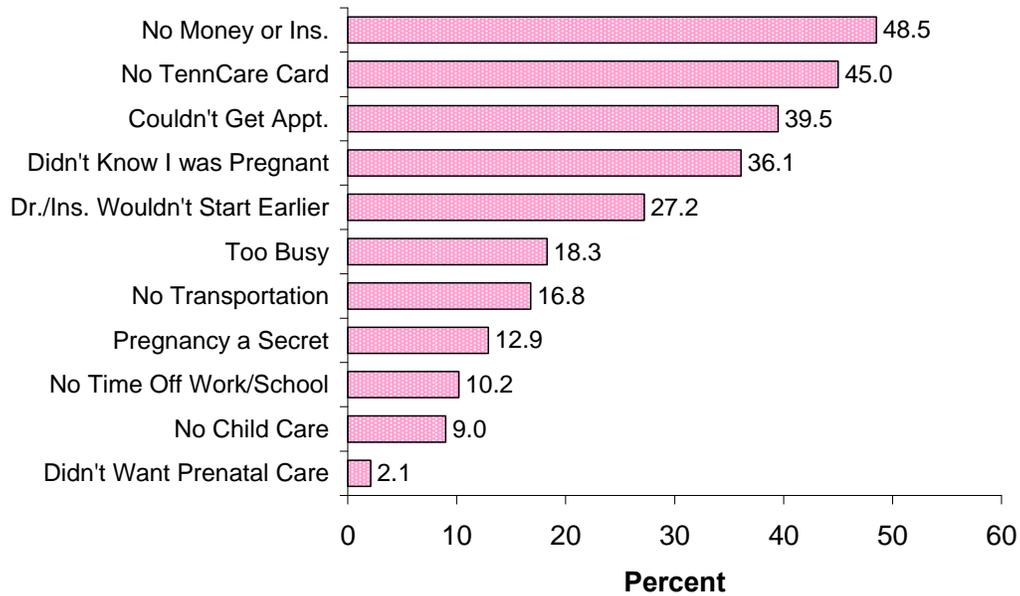
Prenatal Care *cont.*



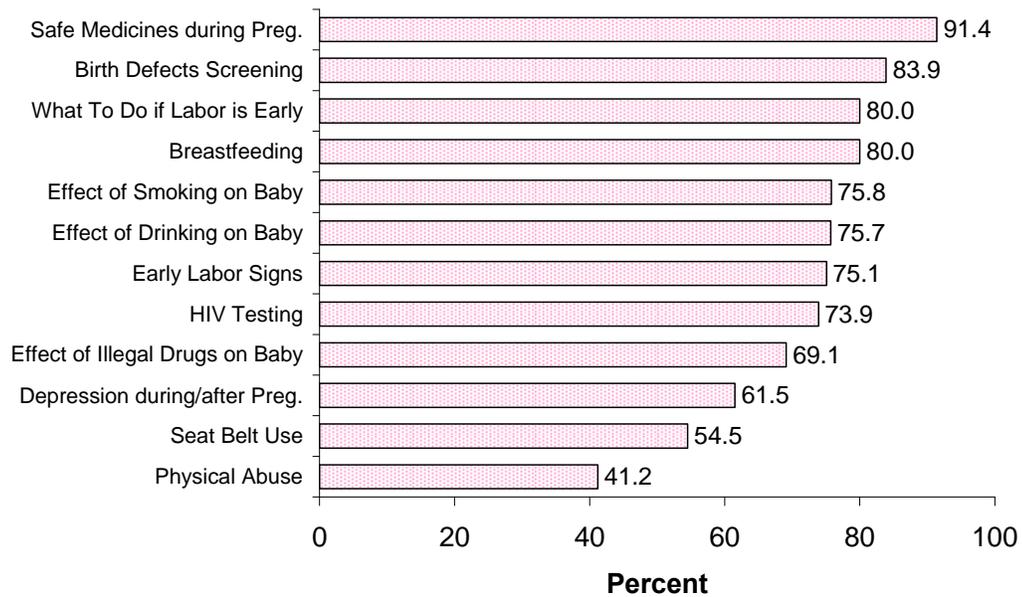
Prenatal Health

Prenatal Care *cont.*

Barriers to Prenatal Care^{*†}



Prenatal Care Content^{*}



^{*} Women may have reported more than one barrier or prenatal care topic. Therefore percentages do not sum to 100%.

[†] Analysis limited to women who did not get prenatal care or who did not get care as early as they wanted.

Prenatal Health

HIV Testing

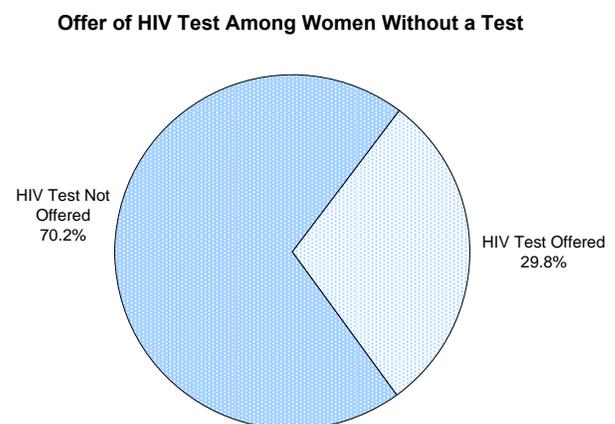
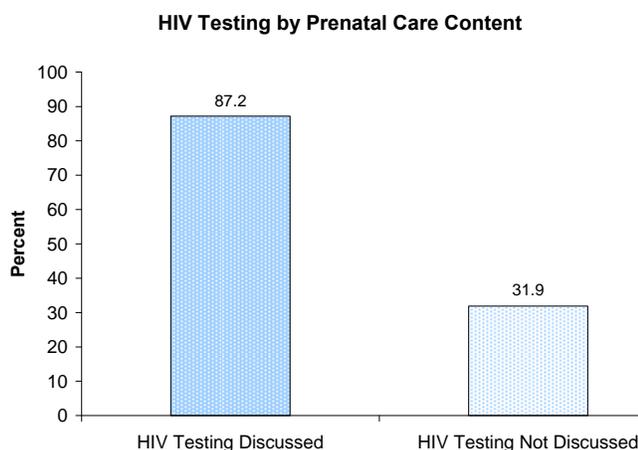
TN PRAMS asks: *At any time during your most recent pregnancy or delivery, did you have a test for HIV (the virus that causes AIDS)? (Q26). Women who had not received a test were asked whether or not they had been offered one (Q27).*

Background

It is recommended that all women be tested for HIV as early as possible in their pregnancies.¹ Women who test positive for HIV and begin treatment early reduce the risk of mother-to-child HIV transmission from 25% (transmission rate for women who don't receive treatment) to 2% or less.^{1,2} However, it's never too late to be tested. Even if a woman has not had prenatal care or has declined testing until labor and delivery, a rapid HIV test can be done at that time and treatment started during labor can still reduce transmission to approximately 10%.²

Key Findings

- Over one-quarter (26.4%) of women did not receive an HIV test during pregnancy or delivery.
- White non-Hispanics were less likely than black non-Hispanics to receive an HIV test.
- Married women were less likely to receive an HIV test than those who were not married.
- Among women who received prenatal care, 26.1% reported that getting tested for HIV was not discussed during any of their prenatal care visits.
- Women whose prenatal care included a discussion of HIV testing were more likely to have received an HIV test than women whose prenatal care did not include such a discussion.
- The majority of women who did not have an HIV test reported that they were not offered an HIV test (70.2%). It was not possible to determine why the remaining women who were offered an HIV test did not receive one.

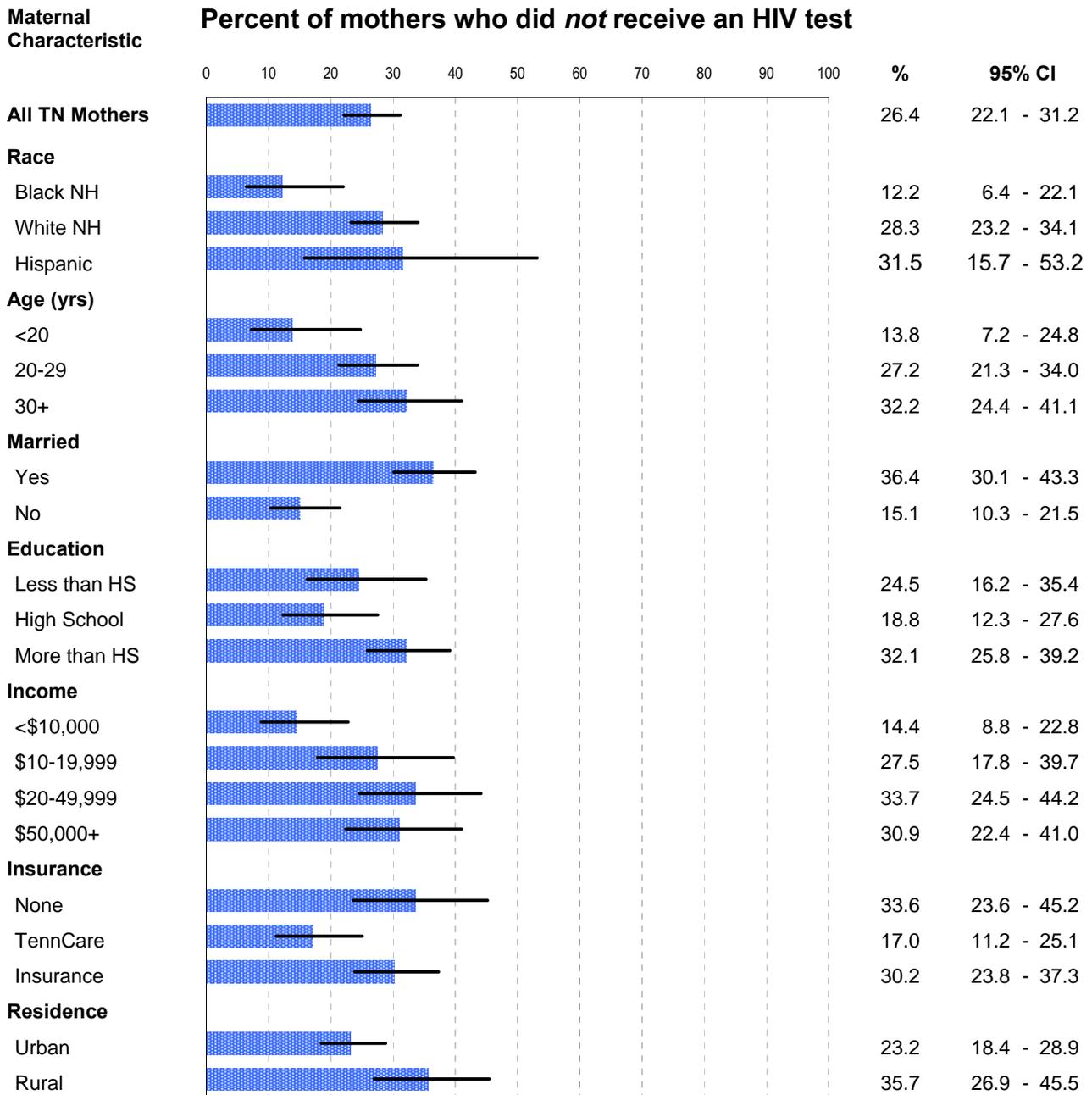


¹ Centers for Disease Control and Prevention. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. MMWR 2006; 55(RR-14):1-16.

² Centers for Disease Control and Prevention. *One Test. Two Lives*. Accessed May 2011 at <http://www.cdc.gov/hiv/topics/perinatal/1test2lives/default.htm>.

Prenatal Health

HIV Testing *cont.*



Prenatal Health

Oral Health

TN PRAMS asks: During your most recent pregnancy 1) Did you need to see a dentist for a problem? (Q77a); 2) Did you go to a dentist or dental clinic? (Q77b); and 3) Did a dental or other health care worker talk with you about how to care for your teeth and gums? (Q77c).

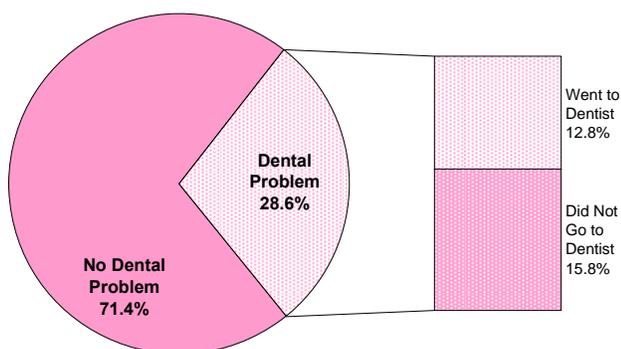
Background

Oral health problems are common in pregnant women.¹ Vomiting caused by morning sickness can weaken tooth enamel causing cavities, and hormonal changes can lead to inflammation of the gums.^{1,2} Left untreated, severe gum disease can lead to periodontal disease which has been associated with adverse pregnancy outcomes such as preterm birth and low birth weight.^{1,2} Routine dental care and necessary treatment for oral health problems is safe and effective during pregnancy, and it is recommended that pregnant women have an oral exam as soon as possible during their pregnancy.¹

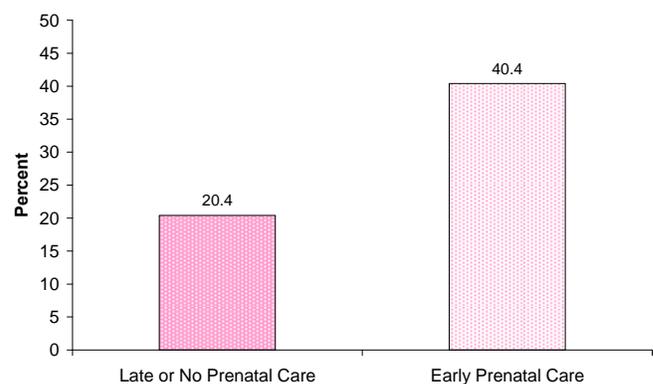
Key Findings

- Approximately two-thirds (62.7%) of mothers did not see a dentist during pregnancy.
- Black non-Hispanics were less likely to see a dentist than white non-Hispanics.
- Over one-quarter (28.6%) of women reported having a dental problem during pregnancy.
- Among women with a reported dental problem, more than one-half did not go to a dentist or dental clinic during pregnancy.
- Women who received early prenatal care were more likely to see a dentist during their pregnancy than those who received late or no prenatal care.
- Approximately one-third (35.0%) of women reported that a dental or other health care worker talked to them about how to care for their teeth and gums.

Dental Problems and Dental Care



Prevalence of Dental Visit by Prenatal Care Timing

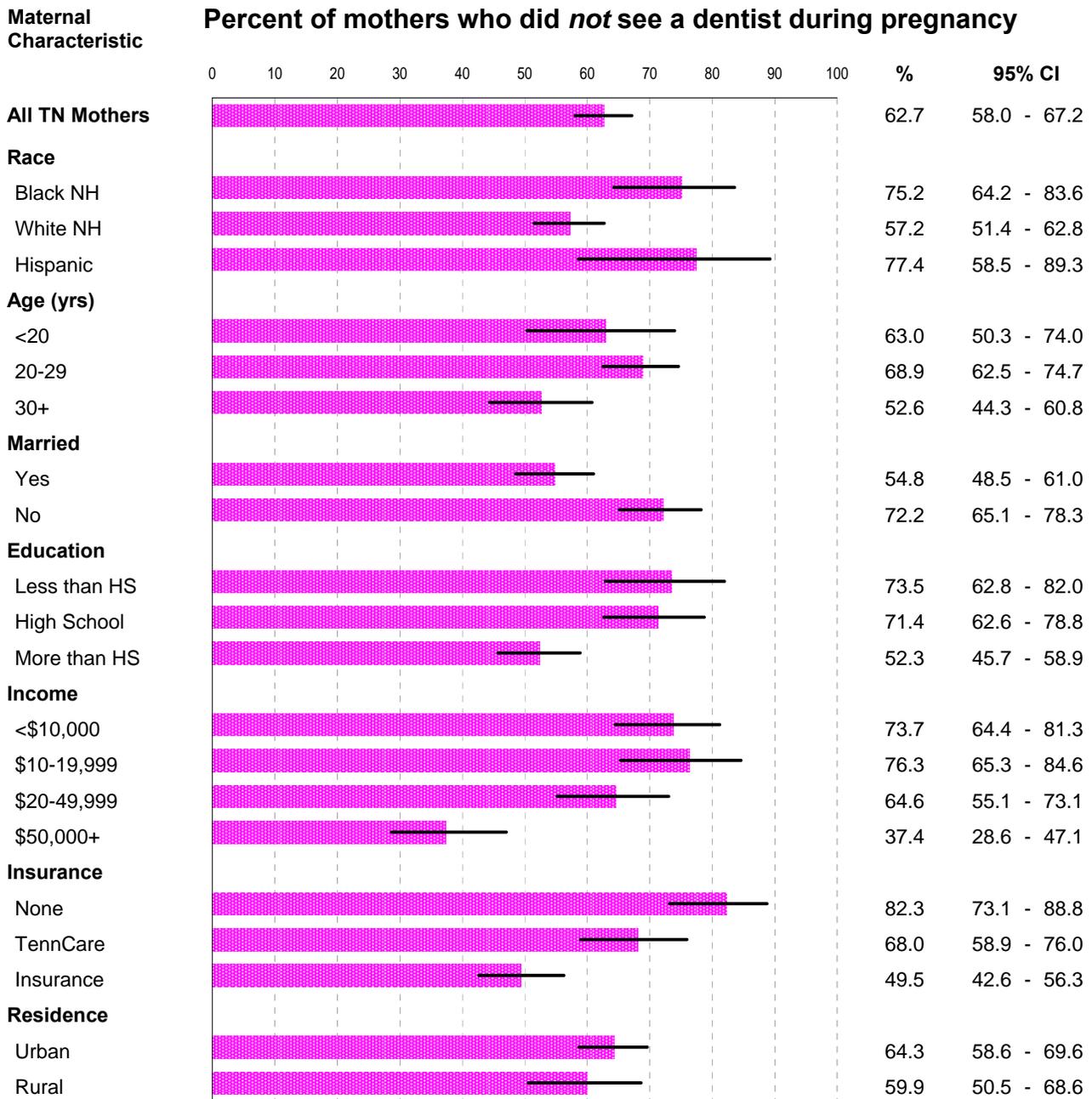


¹ New York State Department of Health (2006). *Oral Health Care During Pregnancy and Early Childhood: Practice Guidelines*. Accessed June 2011 at <http://www.health.state.ny.us/publications/0824.pdf>.

² Mayo Clinic. *Dental Health During Pregnancy*. Accessed June 2011 at <http://www.mayoclinic.com/health/dental-health-during-pregnancy/MY00719>.

Prenatal Health

Oral Health *cont.*



Prenatal Health

Pregnancy Weight Gain

Adequacy of weight gain during pregnancy was determined using each respondent's self-reported, prepregnancy body mass index (BMI), as well as information on birth plurality and pregnancy weight gain from birth certificate data. Women were grouped into three categories of weight gain – inadequate, adequate and excessive – based on 2009 Institute of Medicine guidelines.¹ [A detailed description of BMI and pregnancy weight gain categories may be found in the data analysis overview on pages iii-iv.]

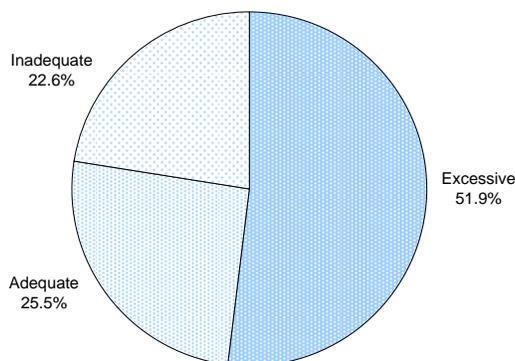
Background

Women whose weight gain during pregnancy is outside the recommended ranges may experience various adverse maternal outcomes, which may include increased risk for pregnancy-induced high blood pressure, gestational diabetes, complications during labor and delivery, postpartum weight retention and subsequent maternal obesity, and an increased risk for unsuccessful breastfeeding.¹ Ideally, women should be within a normal BMI range when they conceive. However, it is important that women gain weight within the recommended guidelines, regardless of their prepregnancy BMI.¹

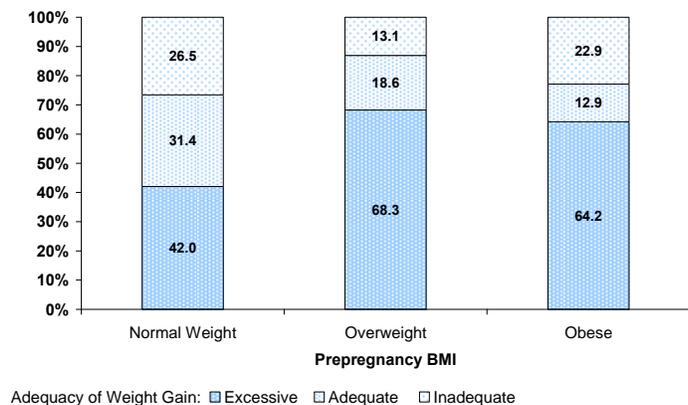
Key Findings

- Almost three-quarters (74.5%) of women did not meet pregnancy weight gain recommendations.
 - 22.6% gained less than the recommended amount.
 - 51.9% gained more than the recommended amount.
- There were no statistically significant differences in the percentage of women failing to meet weight gain recommendations across demographic and socioeconomic subgroups.
- Women who were overweight or obese prior to pregnancy were more likely to experience excessive weight gain during pregnancy than those who were normal weight.
- The prevalence of pregnancy-induced high blood pressure was higher among women with excessive weight gain than among those without excessive weight gain (23.2% versus 11.1%, respectively).
- The prevalence of gestational diabetes was similar among women with inadequate, adequate and excessive weight gain.

Adequacy of Weight Gain During Pregnancy



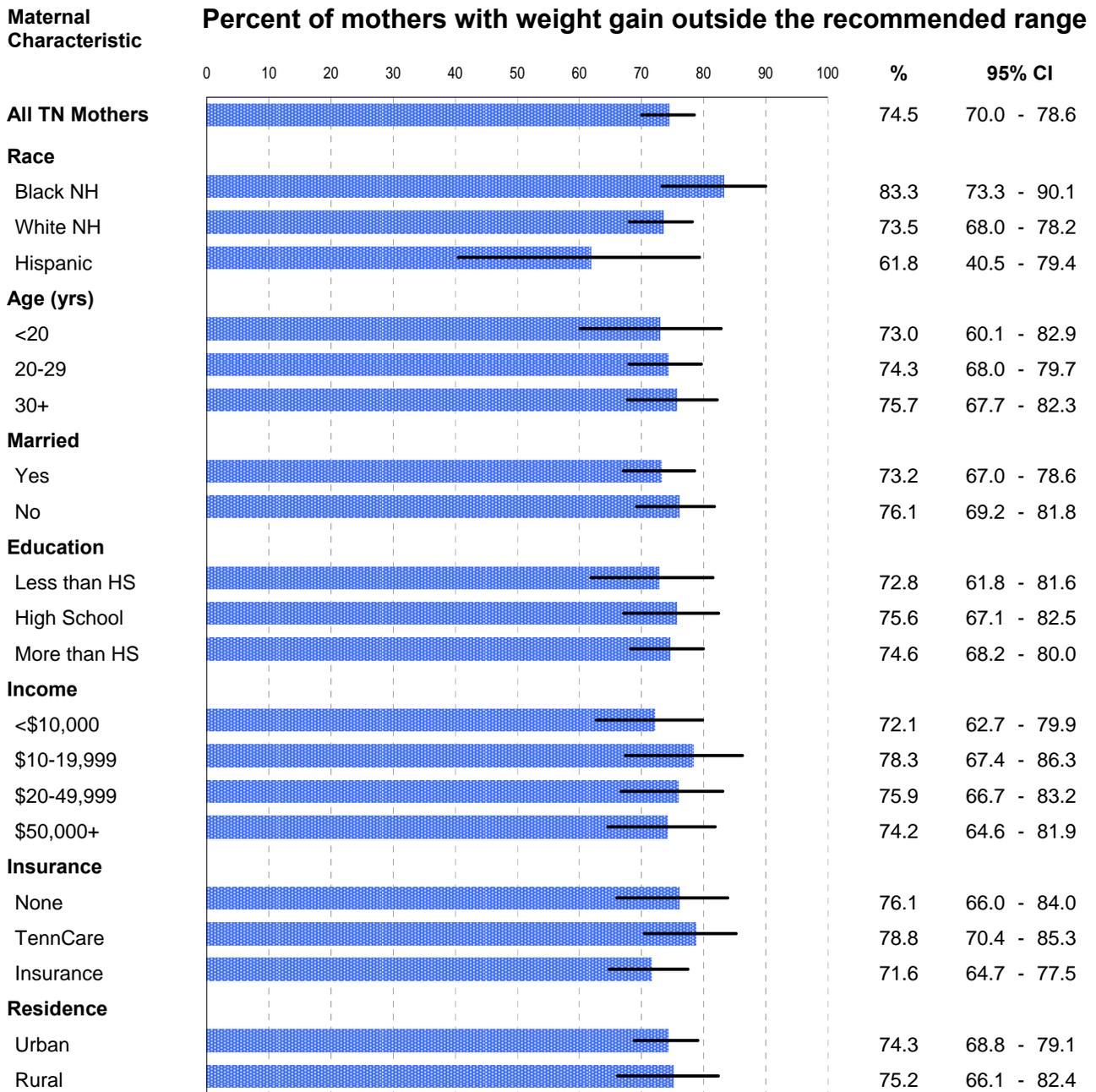
Adequacy of Weight Gain by Prepregnancy BMI



¹ Institute of Medicine and National Research Council. 2009. *Weight Gain during Pregnancy: Reexamining the Guidelines*. Washington, DC: The National Academic Press.

Prenatal Health

Pregnancy Weight Gain *cont.*



Prenatal Health

Gestational Diabetes

TN PRAMS asks: During your most recent pregnancy, were you told by a doctor, nurse or other health care worker that you had gestational diabetes (diabetes that started during this pregnancy)? (Q32).

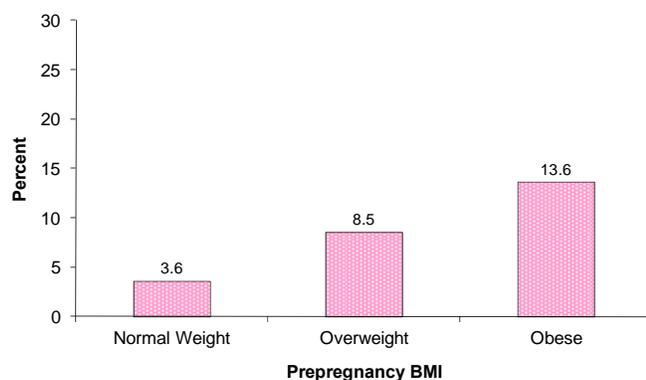
Background

Gestational diabetes is a type of diabetes that first develops during pregnancy, and is characterized by blood sugar levels that are too high.¹ High blood sugar can lead to problems for both a pregnant woman and her baby, including high blood pressure, delivering a too large baby, serious birth trauma for both the mother and infant, and the necessity of a C-section delivery.² Although gestational diabetes typically goes away after delivery, these women are at increased risk of developing type 2 diabetes later in life.² For this reason it is important for women who have had gestational diabetes to be rescreened for diabetes after their baby is born.²

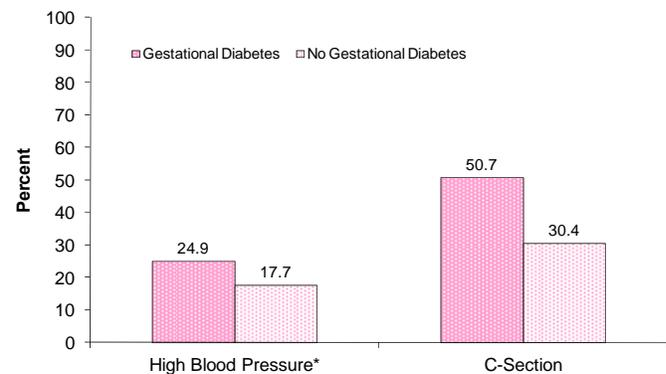
Key Findings

- The prevalence of gestational diabetes among new mothers was 7.5%.
- Compared to women who were normal weight prior to pregnancy, those who were obese were almost four times as likely to be diagnosed with gestational diabetes.
- Women with gestational diabetes were more likely to deliver by C-section than those who did not have gestational diabetes.
- There was not a statistically significant difference in the prevalence of high blood pressure among women with and without gestational diabetes.

Gestational Diabetes Prevalence by Prepregnancy BMI



HBP and C-Section Prevalence by Gestational Diabetes Status



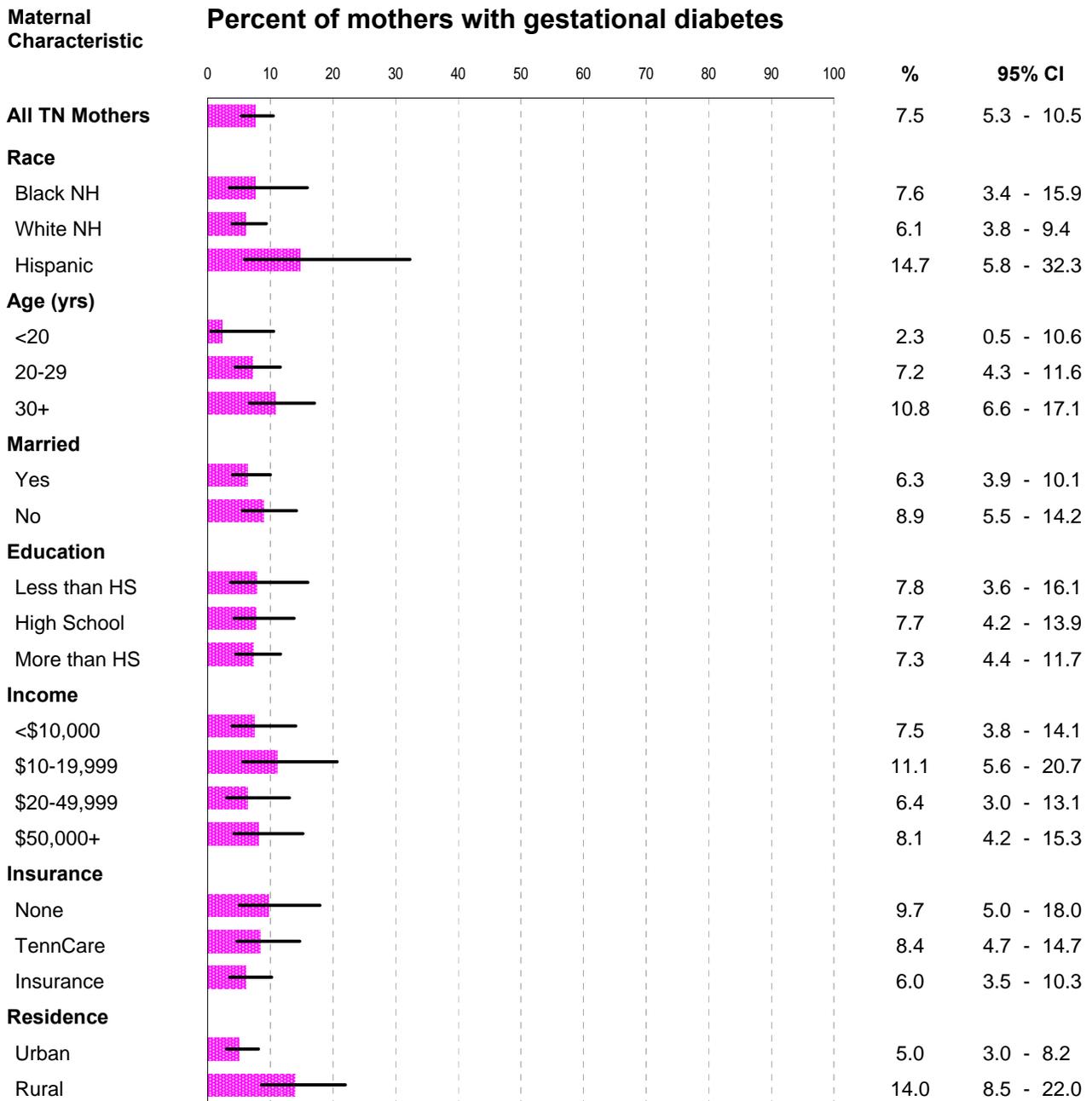
¹ Centers for Disease Control and Prevention. Gestational Diabetes fact sheet. Accessed June 2011 at <http://www.cdc.gov/diabetes/pubs/pdf/gestationalDiabetes.pdf>.

² Centers for Disease Control and Prevention, National Center for Birth Defects and Developmental Disabilities. *Gestational Diabetes and Pregnancy*. Accessed June 2011 at http://www.cdc.gov/NCBDDD/pregnancy_gateway/diabetes-gestational.html.

* Difference was not statistically significant.

Prenatal Health

Gestational Diabetes *cont.*



Tobacco and Alcohol Use

Cigarette Smoking

Alcohol Use

Tobacco and Alcohol Use

Cigarette Smoking

TN PRAMS asks: 1) Have you smoked any cigarettes in the past 2 years? (Q34); and 2) In the 3 months before you got pregnant, how many cigarettes did you smoke on an average day? (Q35). Additional questions ask about cigarette use during the last 3 months of pregnancy (Q36) and at the time of the survey (Q37). Women who reported that they had not smoked in the past 2 years were classified as nonsmokers for all three time periods. Among the remaining women, those with any reported cigarette use (even less than one cigarette) for a given time period were classified as smokers for that time period. Women who smoked prior to but not during pregnancy were classified as quitters. Quitters who reported smoking at the time of the survey were classified as having resumed smoking.

Background

Smoking before and during pregnancy is the single most preventable cause of illness and death among mothers and infants.¹ Women who smoke during pregnancy are at increased risk for many adverse outcomes, including delayed conception, miscarriage, preterm birth, low birthweight, and certain birth defects.¹ In addition, babies that are exposed to secondhand smoke are at increased risk for bronchitis, pneumonia, severe asthma, ear infections and sudden infant death syndrome (SIDS).¹

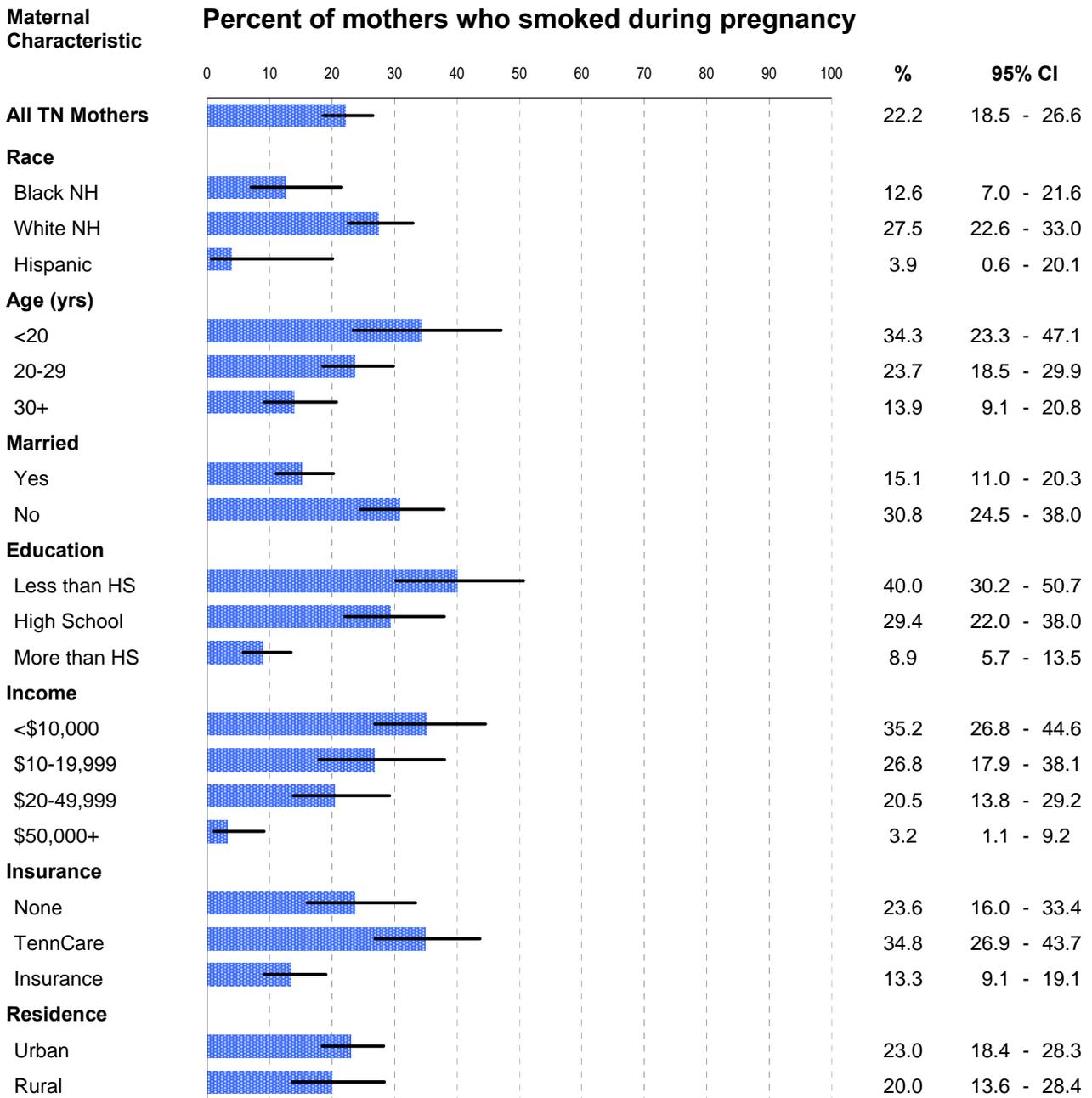
Key Findings

- Approximately one-third of women (34.3%) smoked cigarettes in the 3 months prior to pregnancy.
- Among women who smoked prior to pregnancy, approximately two-thirds continued to smoke during pregnancy, while one-third quit smoking.
- The majority of women who were nonsmokers prior to pregnancy remained nonsmokers during pregnancy – less than 1% of women initiated smoking while pregnant.
- Overall, approximately one-fifth (22.2%) of women smoked during the last 3 months of pregnancy.
- White non-Hispanics were more likely than black non-Hispanics to smoke during pregnancy.
- Unmarried women were more likely than those who were married to smoke during pregnancy.
- Women receiving TennCare were more likely to smoke than those with insurance.
- Among women who quit smoking during pregnancy, almost one-half had resumed smoking at the time of the survey.
- Women with unintended pregnancies were more likely than those with intended pregnancies to smoke prior to pregnancy. However, there was not a statistically significant difference in the percentage of women who smoked during pregnancy or who quit smoking during pregnancy.
- There was not a statistically significant difference in the percentage of women who smoked or who quit smoking during pregnancy among those with early prenatal care versus those with no or late prenatal care.
- Women who reported one or more stressors in the 12 months prior to delivery were more likely to smoke during pregnancy than those who did not report any stressors.

¹ CDC, National Center for Chronic Disease Prevention and Health Promotion. Preventing Smoking During Pregnancy Fact Sheet. Accessed June 2011 at <http://www.cdc.gov/nccdphp/publications/factsheets/Prevention/pdf/smoking.pdf>.

Tobacco and Alcohol Use

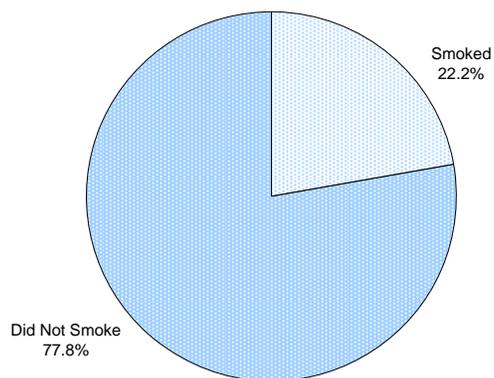
Cigarette Smoking *cont.*



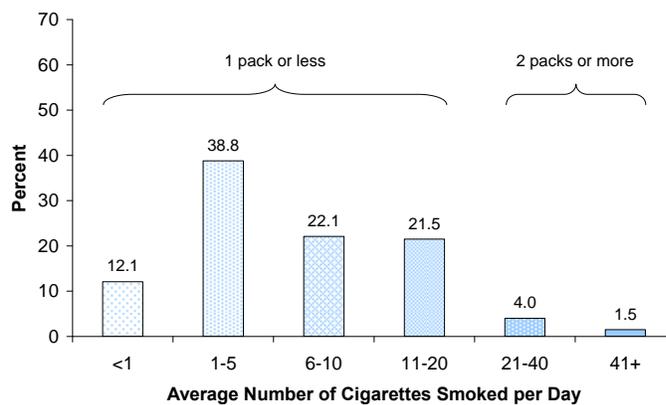
Tobacco and Alcohol Use

Cigarette Smoking *cont.*

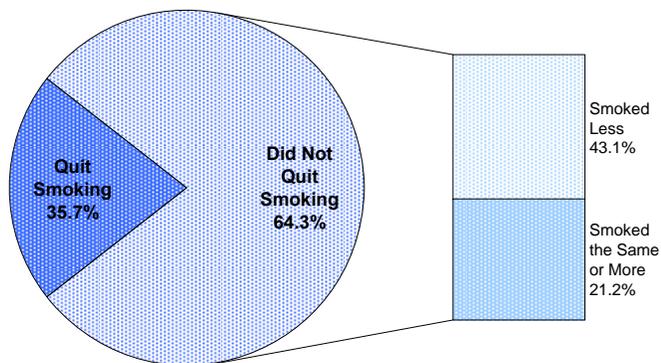
Cigarette Smoking During Pregnancy



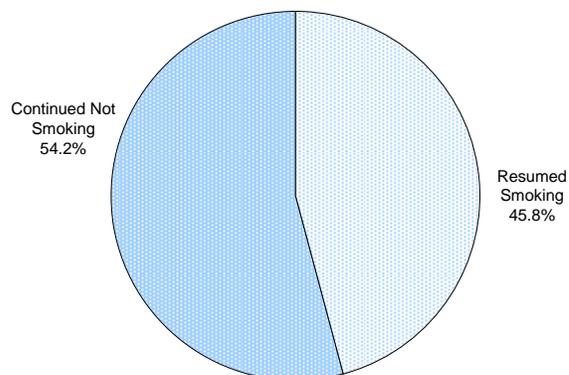
Amount Smoked During Pregnancy*



Smoking During Pregnancy Among Prior Smokers[†]



Resumption of Smoking by Women Who Quit During Pregnancy[‡]



* Analysis limited to women who smoked cigarettes in the last 3 months of pregnancy.

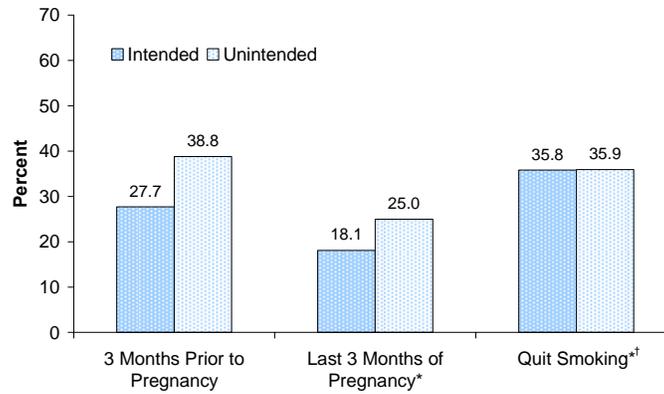
† Analysis limited to women who smoked cigarettes in the 3 months prior to pregnancy.

‡ Analysis limited to women who quit smoking during pregnancy.

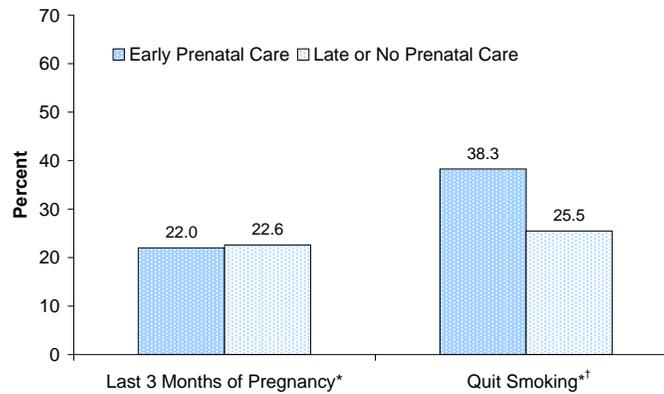
Tobacco and Alcohol Use

Cigarette Smoking *cont.*

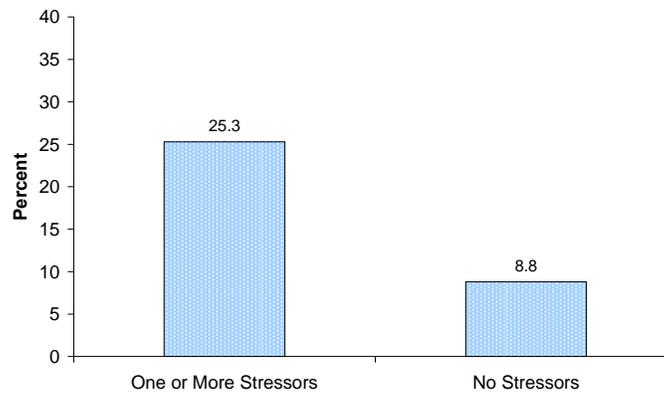
Cigarette Use by Pregnancy Intent



Cigarette Use by Prenatal Care Timing



Smoking During Pregnancy by Presence of Stressors



* Difference was not statistically significant.

† Analysis limited to women who smoked cigarettes in the 3 months prior to pregnancy.

Tobacco and Alcohol Use

Alcohol Use

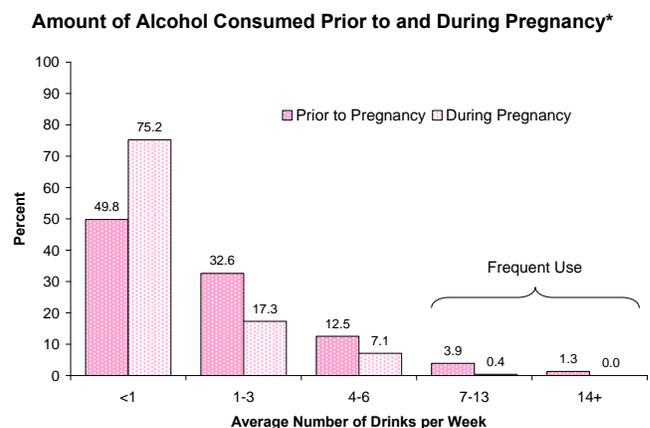
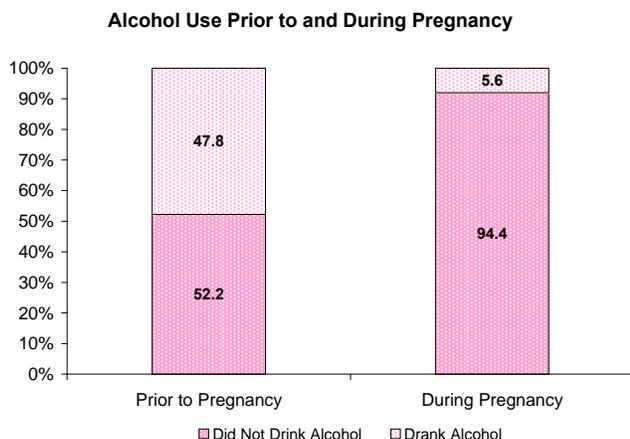
TN PRAMS asks: 1) Have you had any alcoholic drinks in the past 2 years? (Q39); 2) During the 3 months before you got pregnant, how many alcoholic drinks did you have in an average week? (Q40a); and 3) During the 3 months before you got pregnant how many times did you drink 4 alcoholic drinks or more in one sitting (Q40b). Additional questions ask about alcohol use during the last 3 months of pregnancy (Q41a-b). Women who reported not drinking in the past 2 years were classified as nondrinkers for both time periods. Women with any alcohol use (even less than one drink) for a given time period were classified as drinkers for that time period, while those who drank 7 or more drinks per week were classified as frequent drinkers. Women who drank more than 4 drinks in one sitting at least once in a given time period were classified as binge drinkers for that time period. Women who drank prior to but not during pregnancy were classified as quitters.

Background

When a pregnant woman drinks alcohol, so does her unborn baby – alcohol in the mother’s blood passes through the placenta to the baby through the umbilical cord.¹ Drinking alcohol during pregnancy can cause miscarriages, stillbirths, and a range of lifelong disorders known as fetal alcohol spectrum disorders (FASDs).¹ FASDs include a range of physical and mental disabilities and problems with behavior and learning.¹ They are 100% preventable if a woman does not drink alcohol while pregnant.¹ There is no known safe amount of alcohol and no safe time to drink during pregnancy.¹ A woman should not drink any alcohol while pregnant or planning to get pregnant.¹

Key Findings

- Almost one-half of women (47.8%) drank alcohol in the 3 months prior to pregnancy.
- Among women who drank prior to pregnancy, approximately 10% continued to do so during pregnancy, while the remaining 90% quit drinking.
- Overall, 5.6% of women drank alcohol during the last 3 months of pregnancy.
- There were no statistically significant differences in alcohol use during pregnancy across demographic and socioeconomic subgroups.
- Among women who drank prior to pregnancy, 5% did so frequently and almost one-half (45%) engaged in binge drinking.
- Among women who drank during pregnancy less than 1% were frequent drinkers and 15% were binge drinkers.

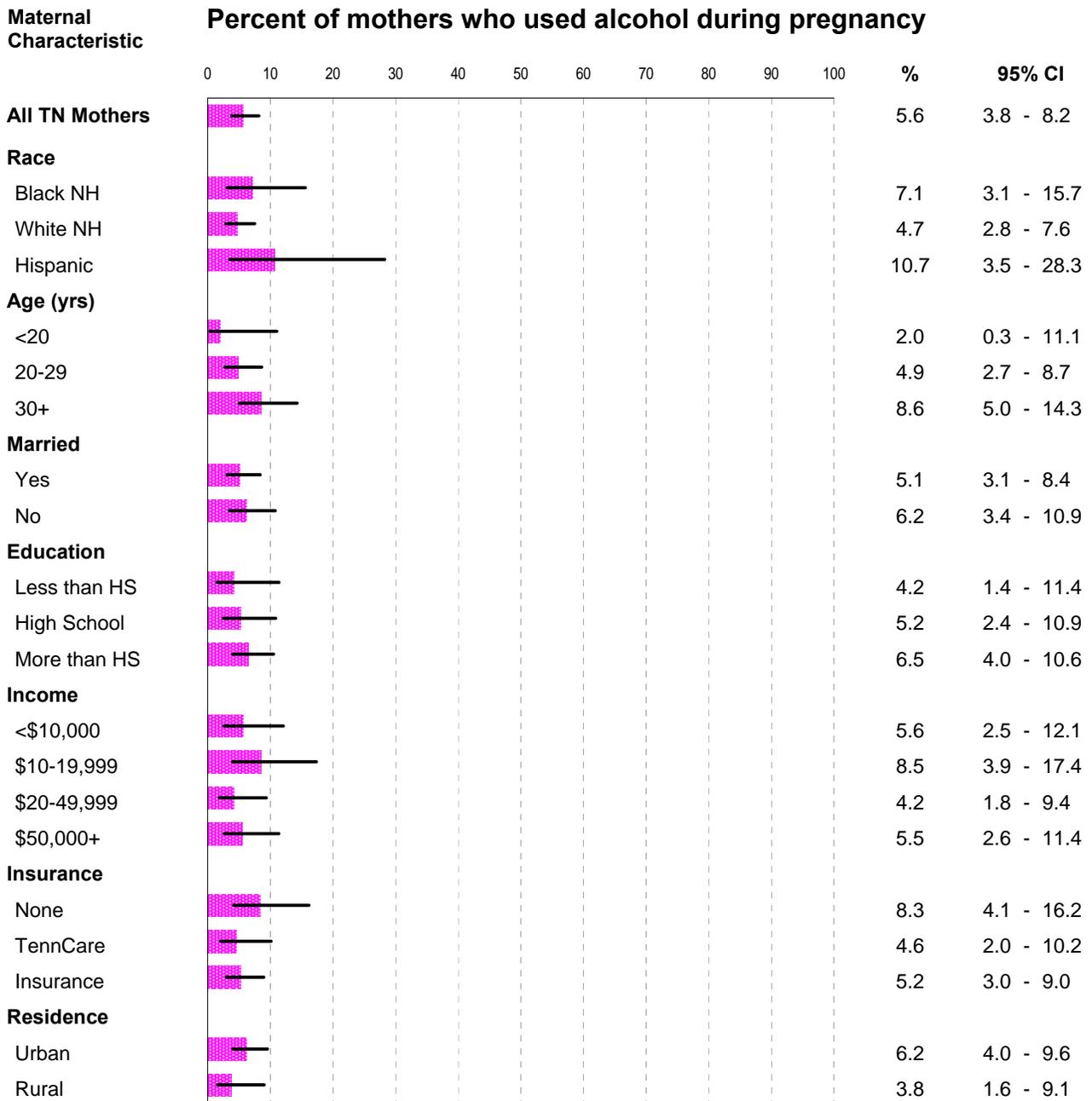


¹ CDC, National Center on Birth Defects and Developmental Disabilities. Fetal Alcohol Spectrum Disorders Homepage. Accessed June 2011 at <http://www.cdc.gov/ncbddd/fasd/index.html>.

* Analysis limited to women who drank alcohol during a specified time period.

Tobacco and Alcohol Use

Alcohol Use *cont.*



Social and Economic Situation

WIC Participation

Physical Abuse

Maternal Stressors

Social and Economic Situation

WIC Participation

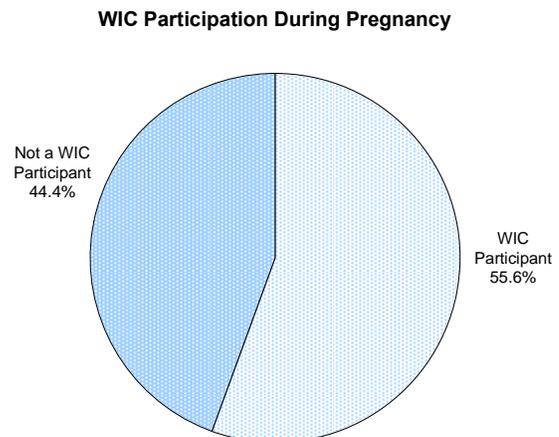
TN PRAMS asks: *During your most recent pregnancy, were you on WIC (the Special Supplemental Nutrition Program for Women, Infants and Children)? (Q31).*

Background

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is a national program to enhance maternal and infant health through better nutrition and education.¹ WIC enhances the health of women, infants and children by promoting improved preconception nutrition status, breastfeeding, infant feeding practices, childhood immunizations, proper nutrition, and the use of appropriate medical services by women and children.¹ Eligibility for the program is based on income and nutritional risk.¹ WIC has been shown to be effective in reducing the incidence of low birthweight, preterm delivery, and small-for-gestational age births, especially among women at high risk because of sociodemographic characteristics or nutritional or medical conditions.¹

Key Findings

- Over one-half (55.6%) of new mothers were enrolled in WIC during pregnancy.
- Black non-Hispanics were more likely to participate in WIC than white non-Hispanics.
- WIC participation increased with decreasing age, with almost 90% of teen mothers enrolled in the program.
- Unmarried women were more likely to participate in WIC than married women.
- Based on household income and family size in the twelve months prior to delivery, almost two-thirds (63.5%) of women qualified for WIC, and the majority of these qualifying women (78.8%) were enrolled in the program during pregnancy.*
- WIC participation was approximately 80% among women who reported eating less than they felt they should in the 12 months prior to delivery because there wasn't enough money to buy food.
- WIC participants were less likely than non-participants to initiate breastfeeding (53.0% vs. 77.0%, respectively).

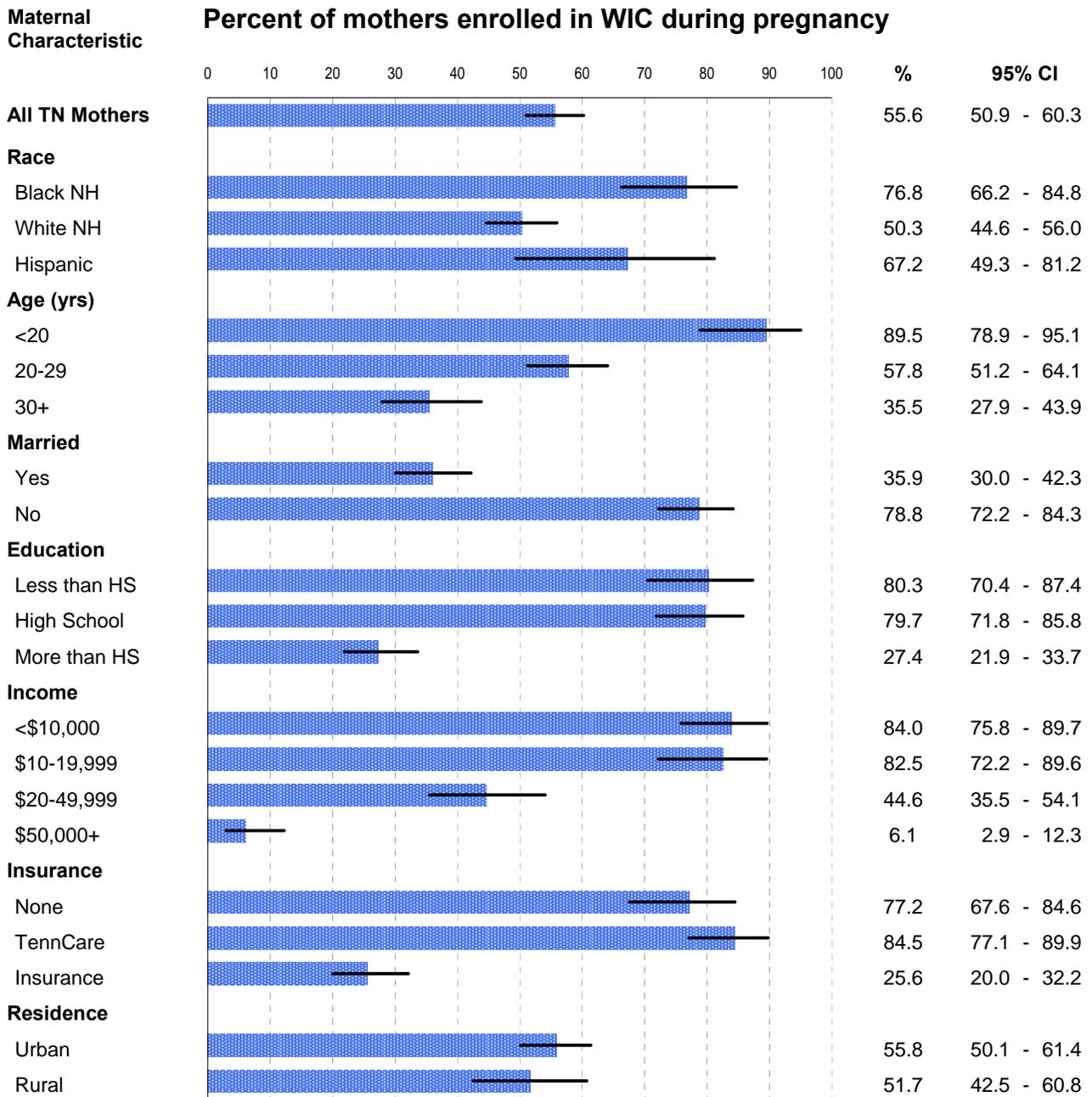


¹ Centers for Disease Control and Prevention. 2002 PRAMS Surveillance Report: Multistate Exhibits, WIC Participation during Pregnancy. Accessed July 2011 at <http://www.cdc.gov/PRAMS/2002PRAMSSurvReport/MultiStateExhibits/Multistates10.htm>.

* A detailed description of eligibility determination may be found in the data analysis overview on pages iii-iv.

Social and Economic Situation

WIC Participation *cont.*



Social and Economic Situation

Physical Abuse

TN PRAMS asks: During the 12 months before you got pregnant with your new baby, did your husband or partner push, hit, slap, kick, choke or physically hurt you in any other way? (Q46). An additional and similarly worded question asks about abuse during pregnancy (Q47). Women were considered physically abused if they responded positively to one or both of the above questions. Due to reporting requirements in Tennessee, mothers who were under 18 years of age were not asked physical abuse questions and were therefore not included in the analyses.

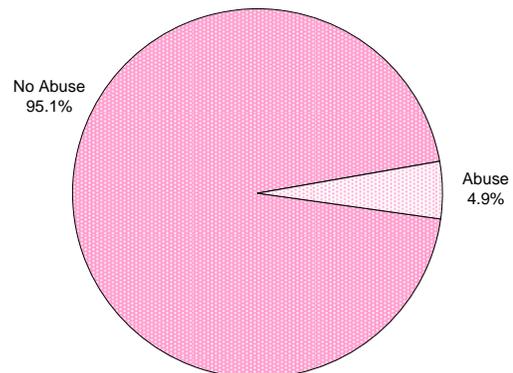
Background

Physical violence against women around the time of pregnancy can adversely affect the health and well-being of women, their fetuses and infants, and other children in the household.¹ It is associated with use of alcohol, tobacco and drugs; a high level of stressful life events; unintended pregnancies; delayed entry into prenatal care; maternal infection, anemia, second- and third-trimester bleeding, and inadequate weight gain; preterm labor; and low birthweight.¹ Prenatal care visits offer a unique window of opportunity for health care providers to identify and assist women who are at risk for or are experiencing violence.¹ It is recommend that providers screen for violence at the first prenatal care visit, at least once per trimester and at the postpartum checkup.¹

Key Findings

- Approximately 5% of women reported physical abuse before and/or during pregnancy.
- Unmarried women were more likely to be abused than those who were married.
- Women receiving TennCare were more likely to be abused than those with insurance.
- Physical abuse was the least frequently discussed topic during prenatal care – less than 50% of women reported that a health care worker discussed abuse with them during any of their prenatal care visits (see chart entitled ‘Prenatal Care Content’ on page 25).

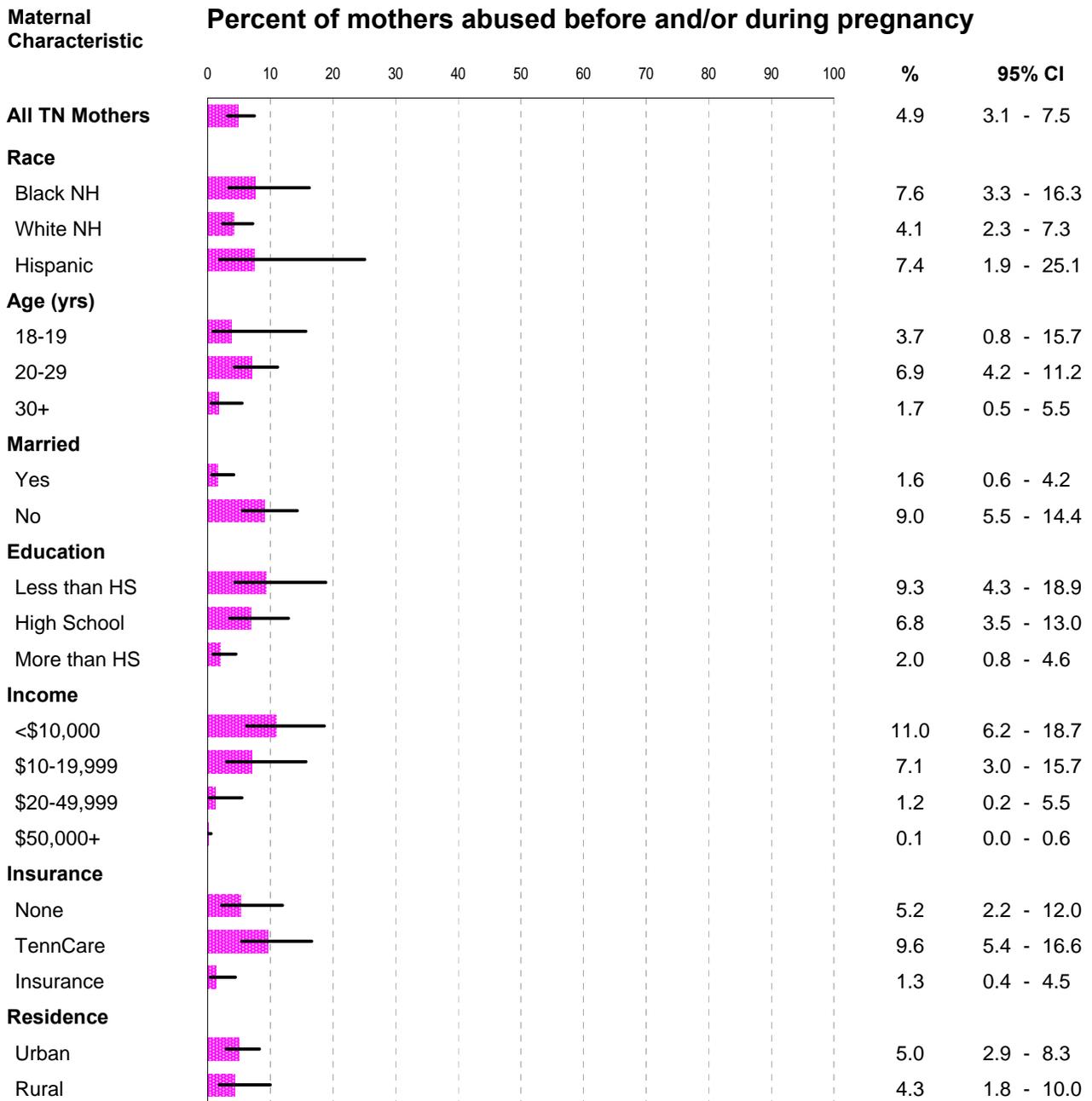
Prevalence of Physical Abuse Before and/or During Pregnancy



¹ Centers for Disease Control and Prevention. 2002 PRAMS Surveillance Report: Multistate Exhibits, Physical Abuse. Accessed July 2011 at <http://www.cdc.gov/PRAMS/2002PRAMSSurvReport/MultiStateExhibits/Multistates11.htm>.

Social and Economic Situation

Physical Abuse *cont.*



Social and Economic Situation

Maternal Stressors

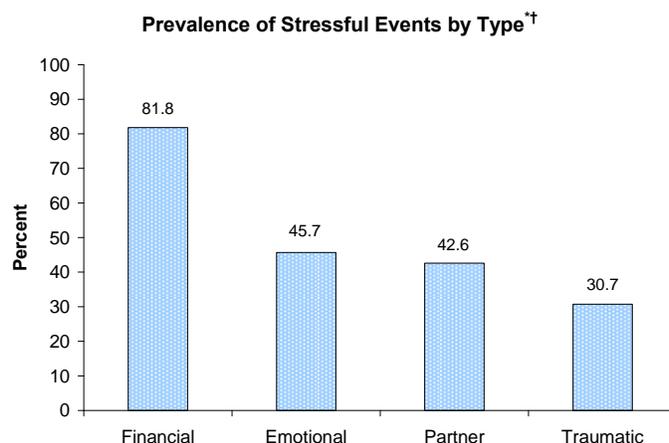
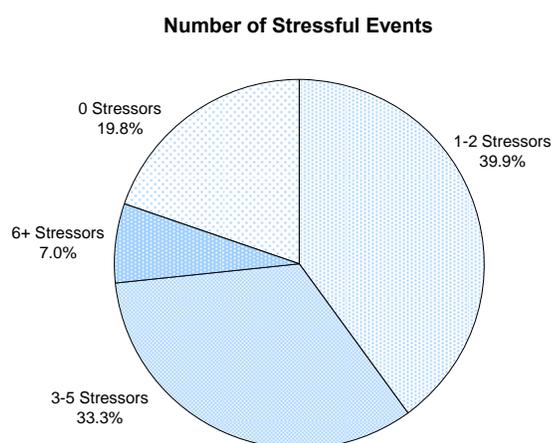
TN PRAMS asks mothers whether or not certain stressful events happened during the 12 months before their new baby was born (Q42a-m). Additional questions ask about food security (Q43), neighborhood safety (Q44) and experiences of racism (Q45) during this same time period.

Background

Most women cope well with the emotional and physical changes of pregnancy and other changes in their lives.¹ However, certain types of negative life events (e.g. divorce, death in the family) and long-term stressors (e.g. difficulty obtaining food, caring for a chronically ill child) may contribute to premature birth and low birthweight.¹ This may occur as the result of hormonal changes, interference with the immune system, or alterations in behavior (e.g. smoking to relieve stress).¹ Because a woman's perception of stress influences how her body responds to it and how her pregnancy is affected, it is important for each pregnant woman to identify sources of stress in her life and develop effective ways to deal with them, or to consult a health care provider if she feels overwhelmed.^{1,2}

Key Findings

- A majority of women (80.2%) reported at least one stressful event in the 12 months prior to delivery.
- The most frequently reported individual stressor was moving to a new address.
- Financial-related problems were the most frequently reported type of stressor.
- Approximately 12% of women reported that during the 12 months prior to delivery they ate less than they felt they should because there wasn't enough money to buy food (i.e. were food insecure).
- Approximately 13% of women reported that during the 12 months prior to delivery they always, often or sometimes felt unsafe in the neighborhood where they lived.
- Approximately 10% of women reported that during the 12 months prior to delivery they felt emotionally upset as a result of how they were treated based on their race.



¹ March of Dimes. *Stress and Pregnancy – In Depth*. Accessed July 2011 at http://www.marchofdimes.com/pregnancy/lifechanges_indepth.html.

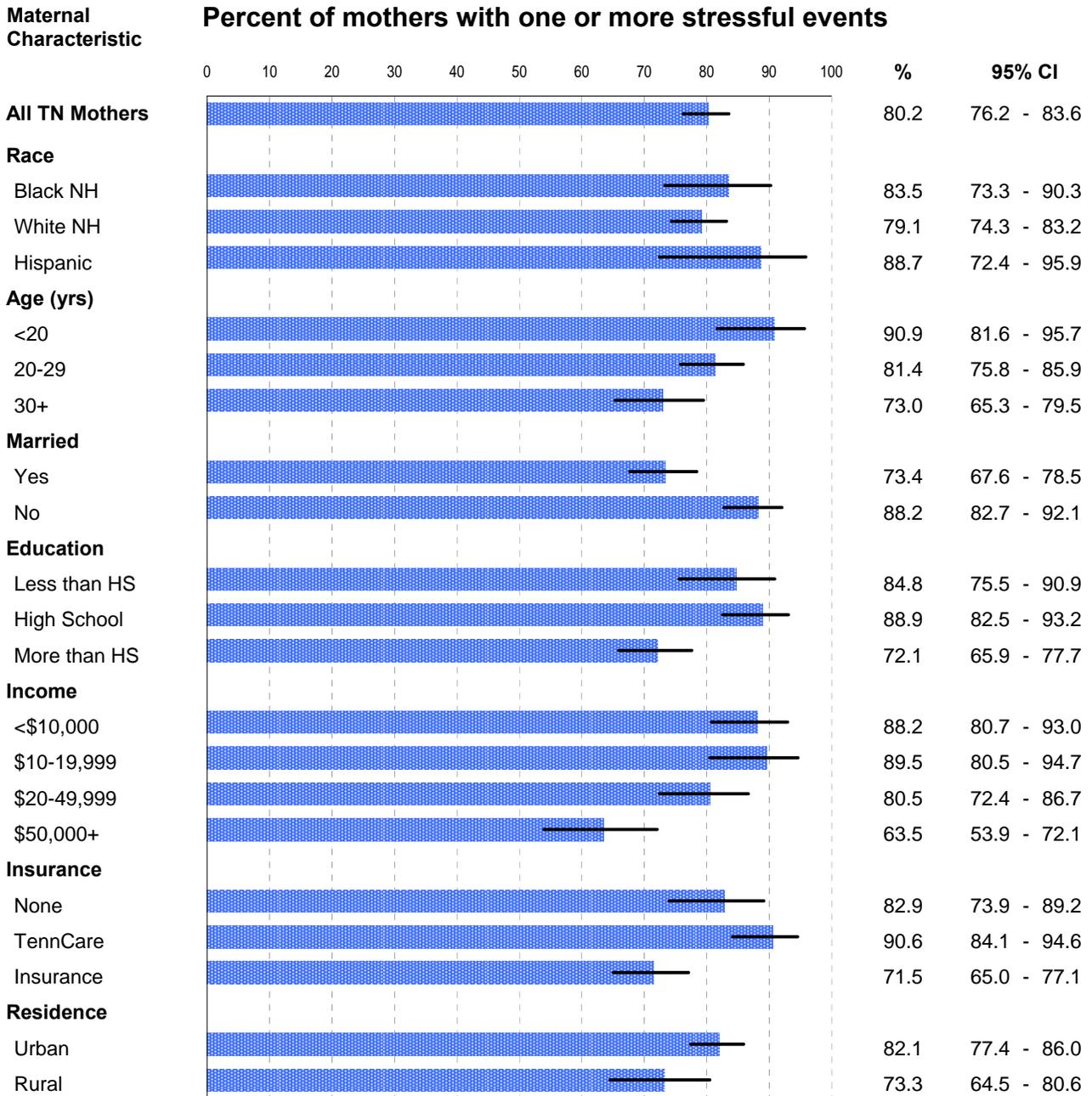
² Hobel CJ, Goldstein A, Barrett ES. Psychological Stress and Pregnancy Outcomes. *Clinical Obstetrics and Gynecology* 2008; 51(2):333-348.

* Women may have reported more than one type of stressor. Therefore, percentages do not sum to 100%.

[†] Analysis limited to women with at least one stressor.

Social and Economic Situation

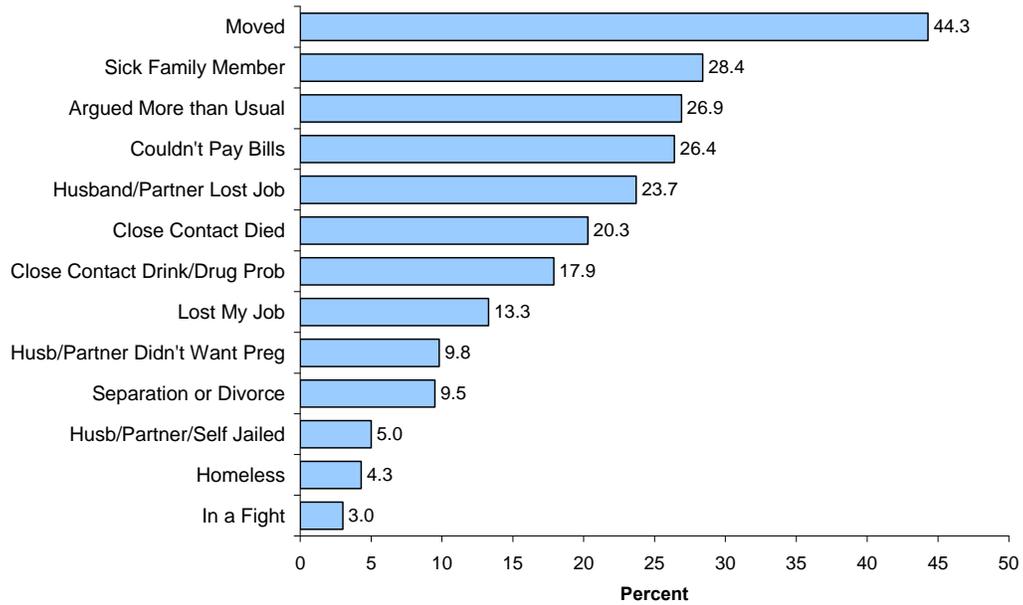
Maternal Stressors *cont.*



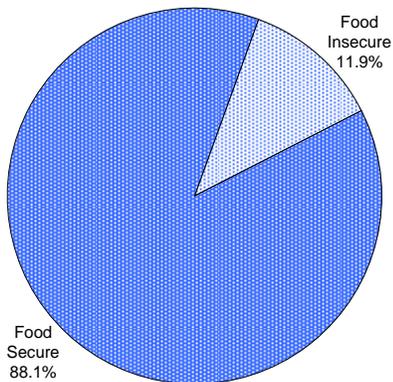
Social and Economic Situation

Maternal Stressors *cont.*

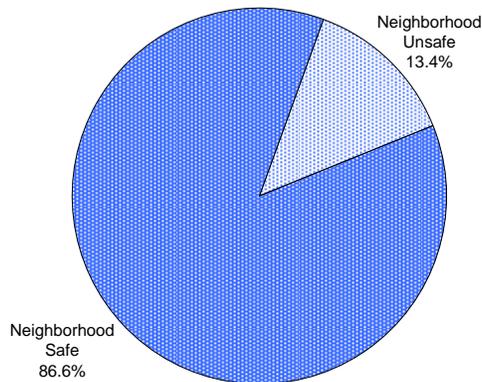
Prevalence of Individual Stressors*



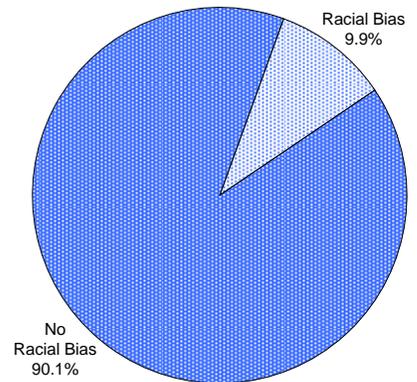
Food Security



Neighborhood Safety



Racial Bias



* Women may have reported more than one type of stressor. Therefore, percentages do not sum to 100%.

Postpartum Health

Postpartum Checkup

Postpartum Depression

Postpartum Birth Control Use

Postpartum Health

Postpartum Checkup

TN PRAMS asks: *Since your new baby was born, have you had a postpartum checkup for yourself? (Q72).*

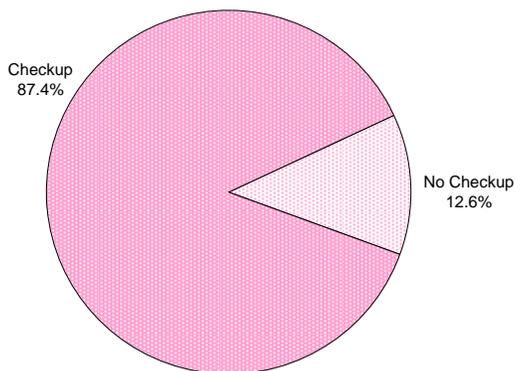
Background

It is recommended that women who give birth have a postpartum health checkup four to six weeks after delivery.¹ Postpartum checkups provide important opportunities to assess the physical and psychological well-being of the mother, counsel her on infant care and family planning, and detect and give appropriate referrals for preexisting or developing chronic conditions such as diabetes, high blood pressure and obesity.¹

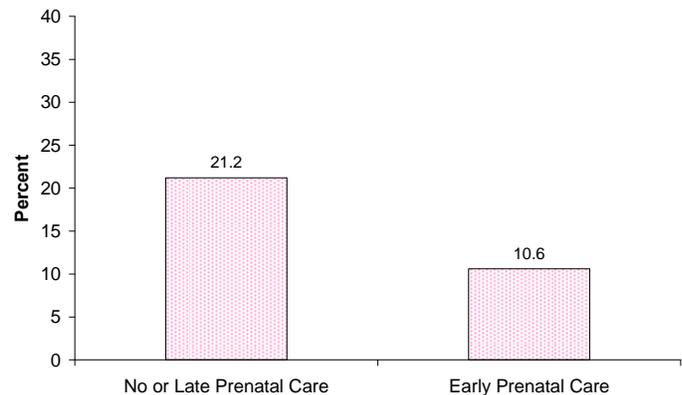
Key Findings

- Approximately 13% of mothers did not receive a postpartum checkup.
- Women with less than a high school education were less likely to have a postpartum checkup than those with higher levels of education.
- Uninsured women and those on TennCare were less likely to have a postpartum checkup than women with health insurance.
- Women with late or no prenatal care were less likely to have a postpartum checkup than were women with early prenatal care.

Prevalence of Postpartum Checkup



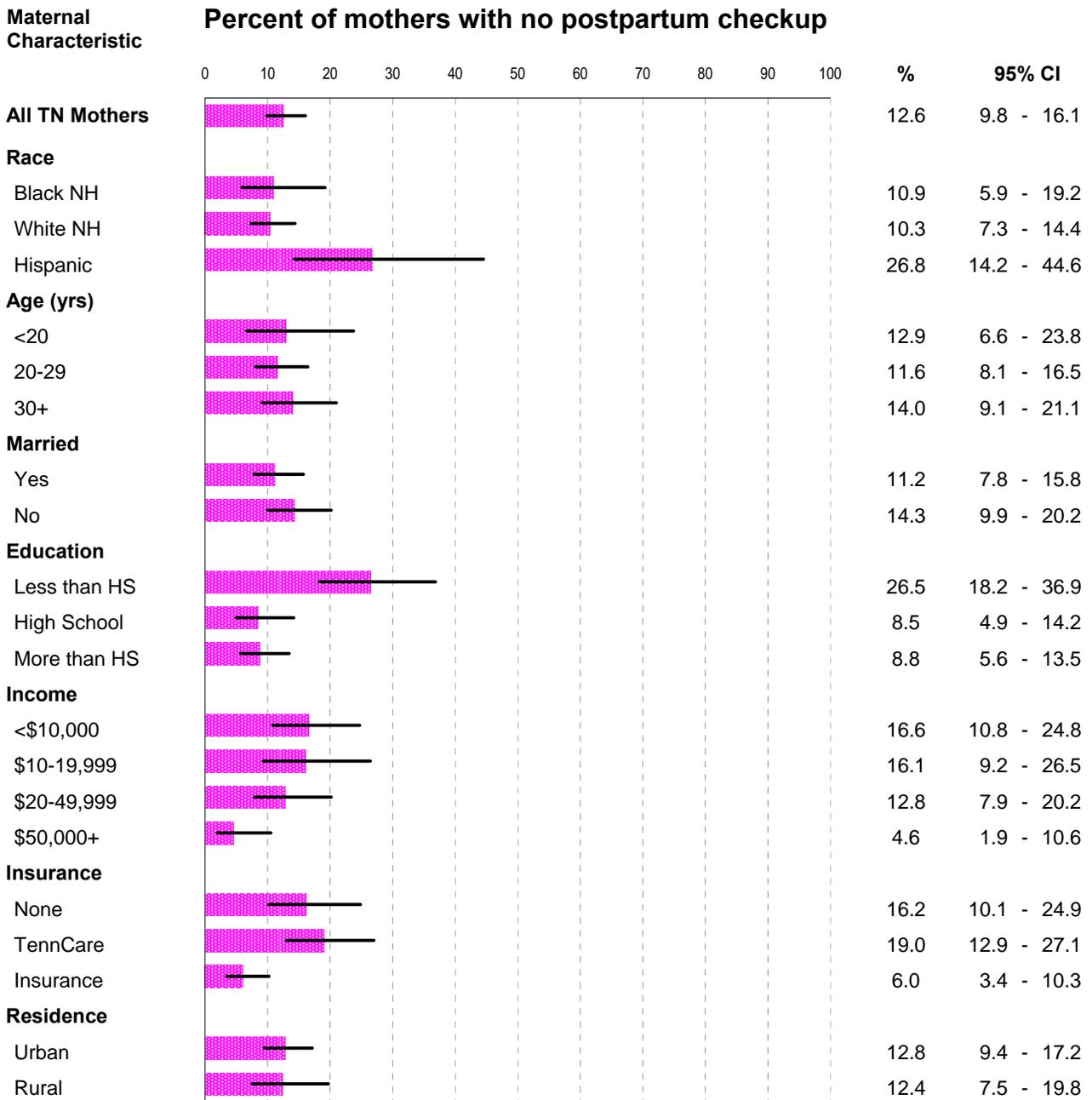
No Postpartum Checkup by Prenatal Care Timing



¹ Centers for Disease Control and Prevention. Postpartum Care Visits – 11 States and New York City, 2004. *MMWR* 2007; 56(50):1312-1316.

Postpartum Health

Postpartum Checkout *cont.*



Postpartum Health

Postpartum Depression

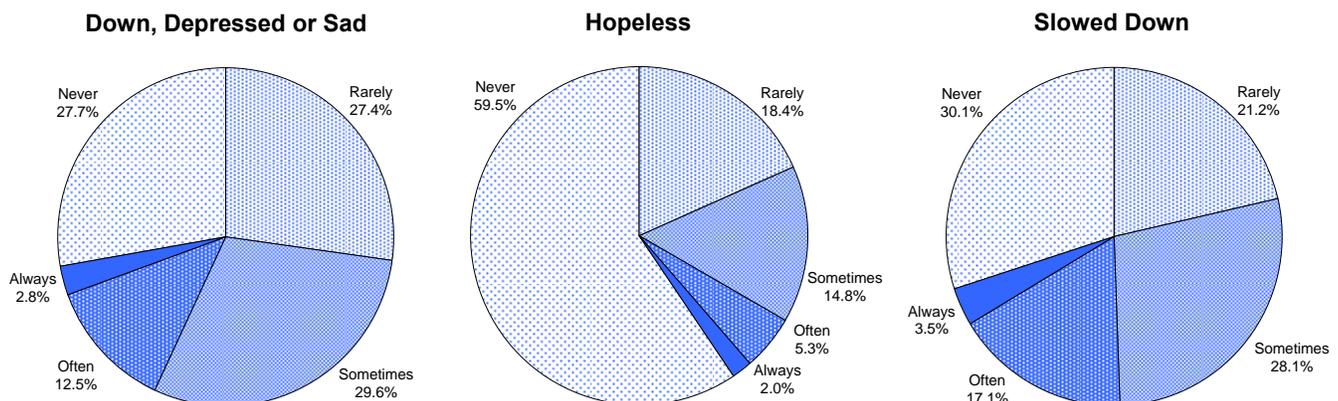
TN PRAMS asks women to use a scale of 1 (never) to 5 (always) to describe their feelings and experiences since their new baby was born. Specifically, women are asked whether they have felt down, depressed or sad; hopeless; or slowed down (Q73a-c). Women who responded 'often' or 'always' to one or more of the above questions were classified as having symptoms of postpartum depression.

Background

Normal changes during and after pregnancy can cause symptoms similar to those of depression.¹ Many women experience the 'baby blues' in the days following childbirth.¹ They may feel sad; lose interest; have changes in eating, sleeping or energy; have problems thinking or concentrating; or have feelings of worthlessness, shame or guilt.² These symptoms typically go away in a few days without treatment, but if they last longer, or get worse, a woman may have postpartum depression (PPD).¹ In addition to the symptoms listed above, women with PPD may feel numb or disconnected from their baby, or have thoughts of hurting themselves or their baby.^{1,2} Untreated PPD can affect a mother's ability to parent and can also affect her baby by causing delays in language development, problems with mother-child bonding, or increased crying.¹ If a woman is worried about the way she is feeling or if the 'baby blues' last more than two weeks, it is important for her to speak with her doctor.^{1,2}

Key Findings

- Approximately 21% of mothers had often or always felt slowed down since their baby was born; 15% had felt down, depressed or sad; and 7% had felt hopeless.
- Overall, almost one-third (28.3%) of women reported symptoms of postpartum depression.
- Women who reported one or more stressors were more likely to be depressed than those who did not, and symptoms of depression increased with increasing number of stressors.
- Women who gave birth to low birthweight infants were more likely to be depressed than those with infants that were not low birthweight (35.3% vs. 27.6%, respectively).

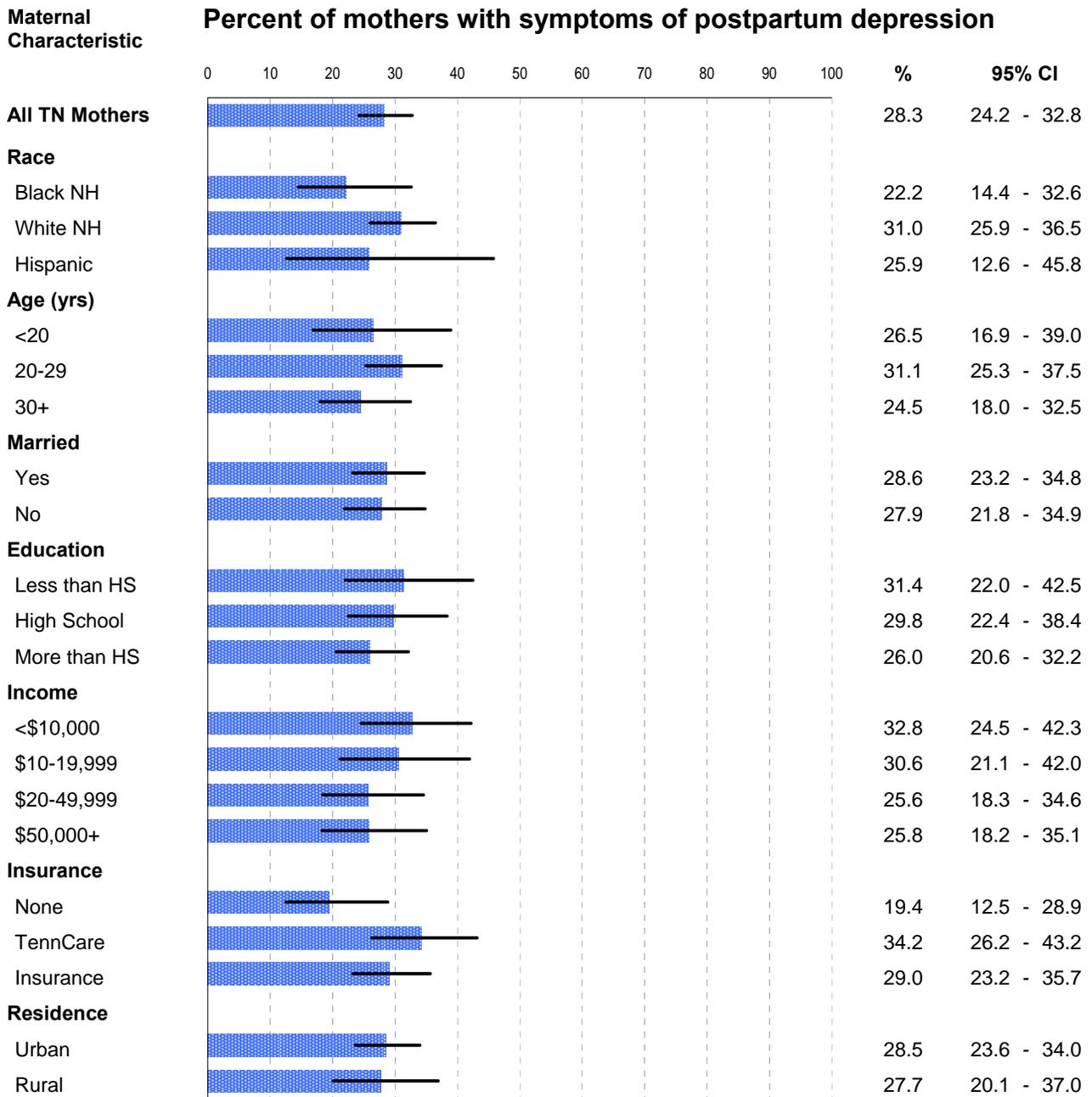


¹ US Department of Health and Human Services, Office of Women's Health. Fact Sheet - Depression During and After Pregnancy. Accessed July 2011 at <http://www.womenshealth.gov/publications/our-publications/fact-sheet/depression-pregnancy.pdf>.

² Centers for Disease Control and Prevention, Reproductive Health. *Depression Among Women of Reproductive Age and Postpartum Depression*. Accessed July 2011 at <http://www.cdc.gov/reproductivehealth/Depression/index.htm>.

Postpartum Health

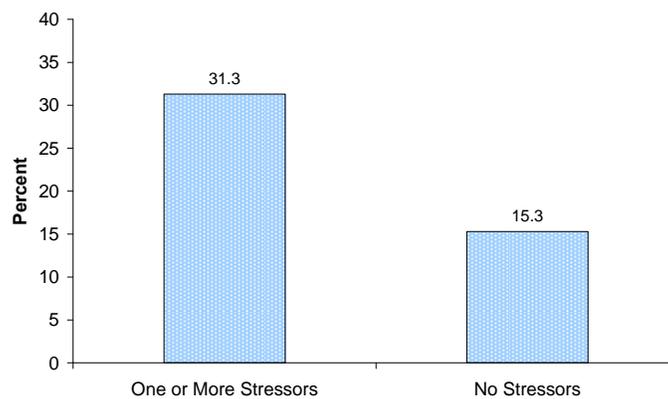
Postpartum Depression *cont.*



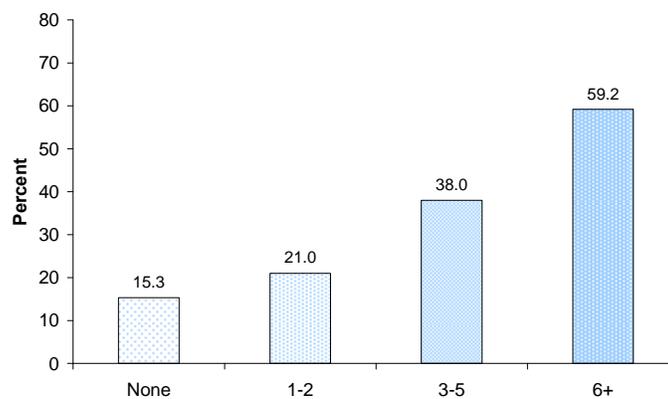
Postpartum Health

Postpartum Depression *cont.*

Postpartum Depression by Presence of Stressors



Postpartum Depression by Number of Stressors



Postpartum Health

Postpartum Birth Control Use

TN PRAMS asks: Are you or your husband or partner doing anything now to keep from getting pregnant? (Q69). Additional questions ask about reasons for not using birth control (Q70) and birth control methods (Q71).

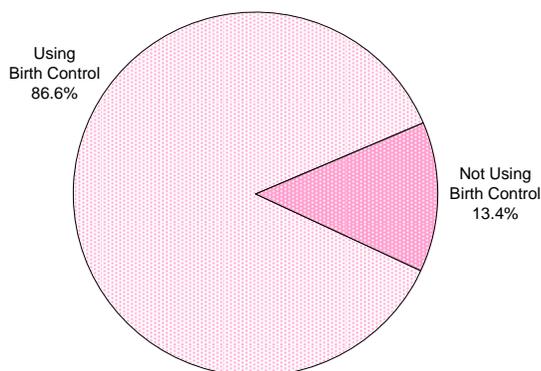
Background

Use of birth control during the postpartum period is important to prevent unintended pregnancies and short birth intervals, both of which can lead to negative health outcomes for mothers and infants.¹ The postpartum period is an important time to initiate birth control because women are accessing the healthcare system and may have increased motivation to avoid another pregnancy.¹ There are safe and effective birth control methods that women can begin at various times after delivery, including immediately postpartum.²

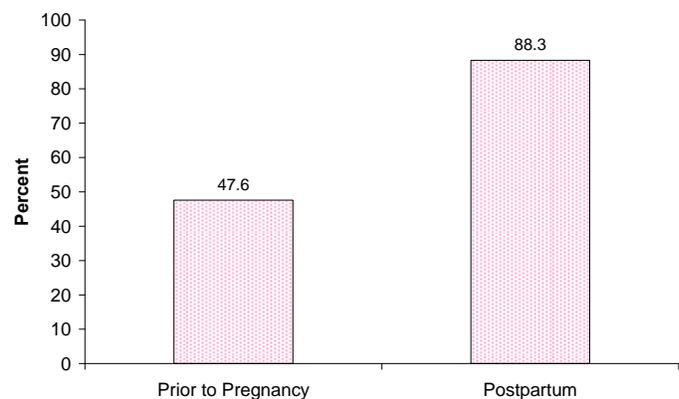
Key Findings

- The majority of mothers were using postpartum birth control – just 13% reported that they were not doing anything to keep from getting pregnant.
- Postpartum birth control use was at least 80% in all demographic and socioeconomic subgroups.
- Among women using birth control, the most frequently used methods were condoms and birth control pills.
- Among women who were not using birth control, the most frequently reported reasons for not doing so were not being sexually active and not wanting to.
- Among women who were *not* trying to get pregnant at the time of their most recent pregnancy, birth control use increased from approximately 48% prior to pregnancy to 88% postpartum.
- Women who had a postpartum checkup were more likely to use birth control than those who had not had a checkup (88.4% vs. 74.4%, respectively).
- There were no statistically significant differences in the percentage of women using postpartum birth control by prenatal care timing or breastfeeding status (data not shown).

Prevalence of Postpartum Birth Control Use



Use of Birth Control Prior to and After Pregnancy*



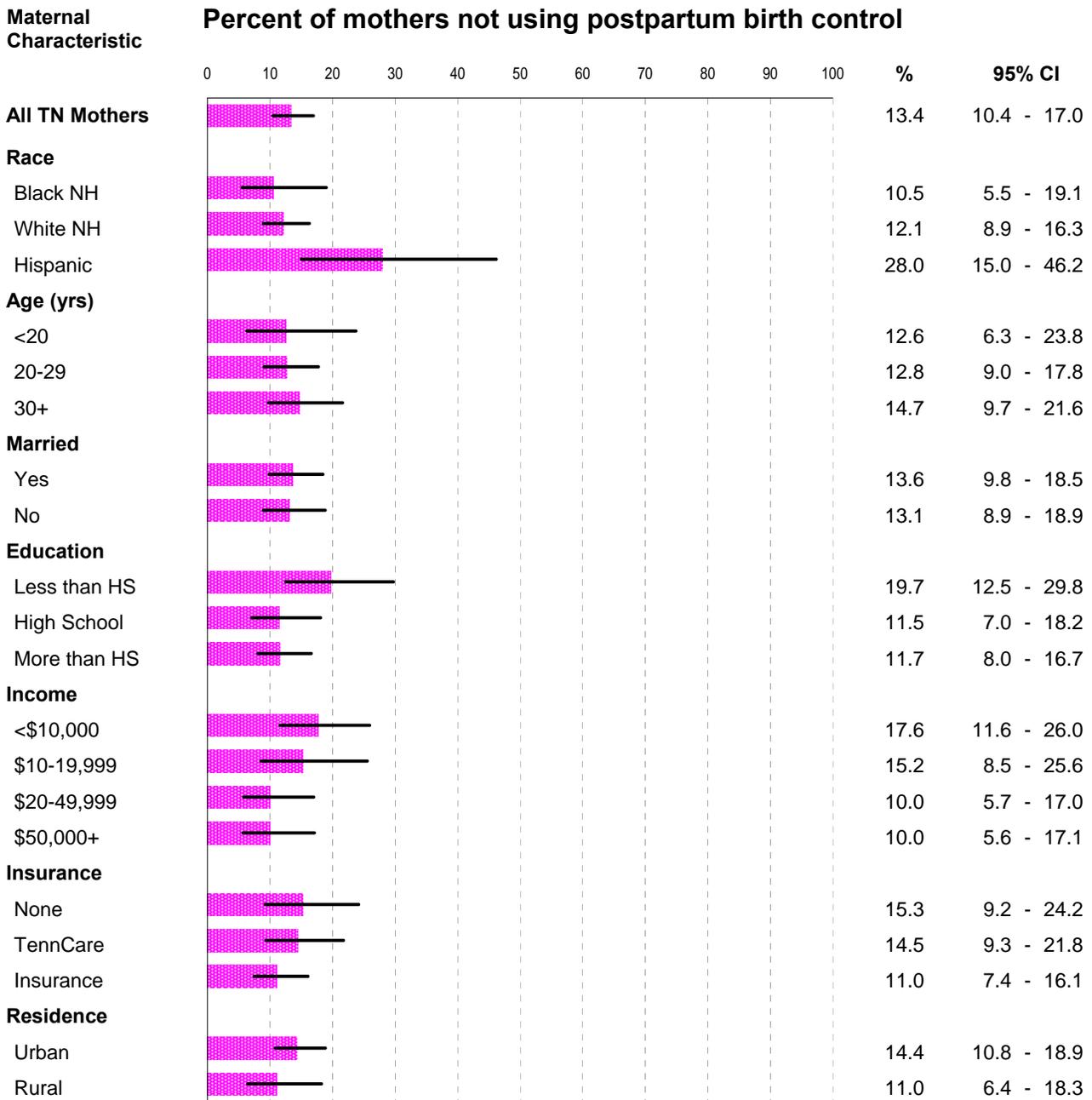
¹ Centers for Disease Control and Prevention. Update to CDC's U.S. Medical Eligibility Criteria for Contraceptive Use, 2010: Revised Recommendations for the Use of Contraceptive Methods During the Postpartum Period. *MMWR* 2011; 60(26):878-883.

² Centers for Disease Control and Prevention. 2002 PRAMS Surveillance Report: Multistate Exhibits, Postpartum Contraceptive Use. Accessed July 2011 at <http://www.cdc.gov/PRAMS/2002PRAMSSurvReport/MultiStateExhibits/Multistates18.htm>.

* Analysis limited to women not trying to get pregnant prior to most recent pregnancy, regardless of pregnancy intent.

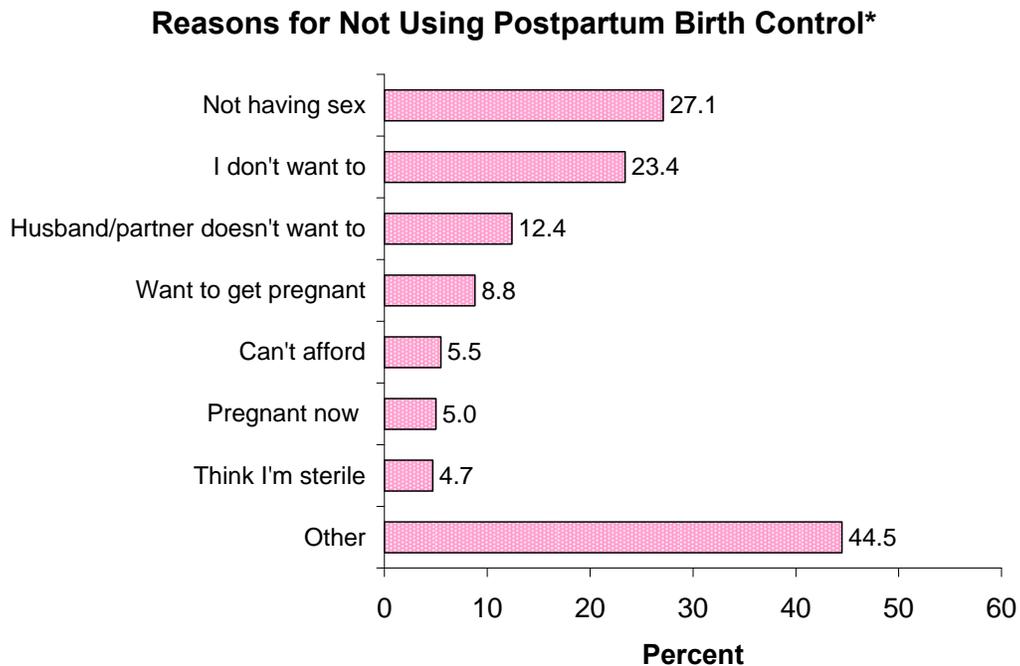
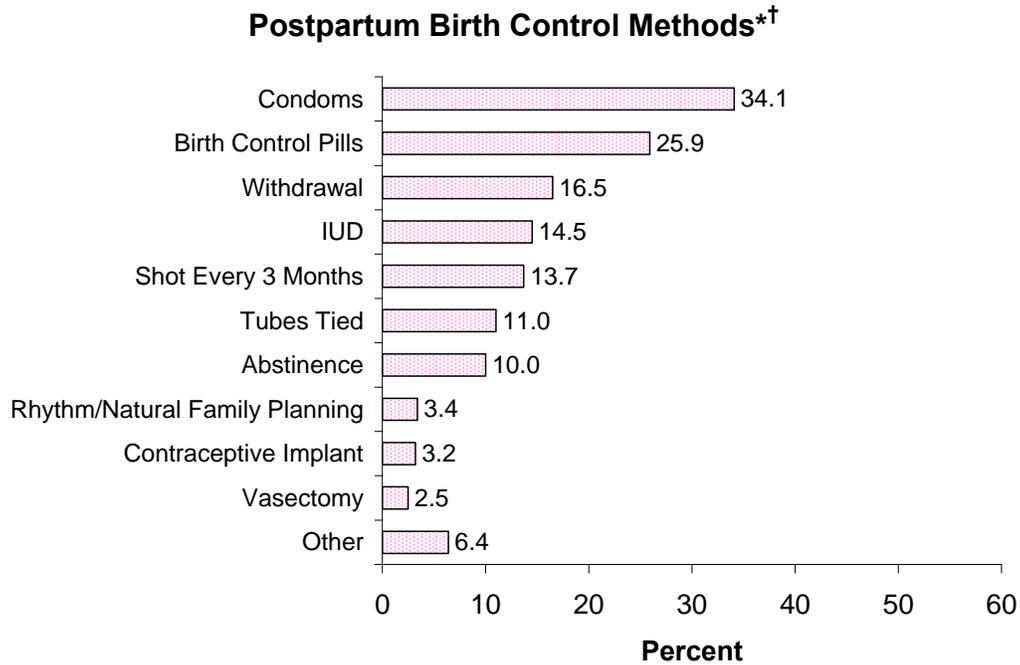
Postpartum Health

Postpartum Birth Control Use *cont.*



Postpartum Health

Postpartum Birth Control Use *cont.*



* Women may have reported more than one reason for not using birth control or birth control method. Therefore, percentages do not sum to 100%.

† The 'other' category includes contraceptive patch, vaginal ring, diaphragm, emergency contraception and/or other (unspecified) method. Less than 2% of women reported using each of these birth control methods.

Breastfeeding

Breastfeeding Initiation
Breastfeeding Duration
Exclusive Breastfeeding

Breastfeeding

Breastfeeding Initiation

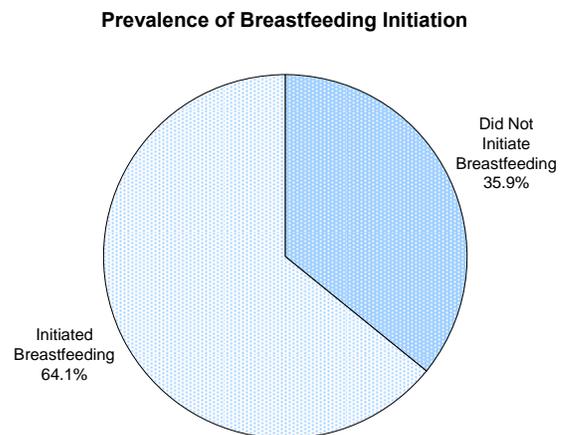
TN PRAMS asks: 1) Did you ever breastfeed or pump breast milk to feed your new baby after delivery, even for a short period of time? (Q57); and 2) What were your reasons for not breastfeeding your new baby? (Q58).

Background

Breastfeeding is generally recognized as the optimum form of nutrition for infants.¹ Breast milk strengthens infant immune systems and decreases the incidence and/or severity of a range of infectious diseases, including respiratory, gastrointestinal and ear infections.¹ Some studies also suggest a reduction in the incidence of diabetes, overweight and obesity, and asthma in older children and adults who were breastfed.¹ In general, exclusive breastfeeding and longer duration of breastfeeding are associated with better maternal health outcomes, and women who breastfeed have a lower risk of breast and ovarian cancer compared to those who have never breastfed.¹ Breastfeeding also has important psychosocial and economic benefits, such as promoting mother-infant bonding and money saved on formula and infant health care costs.¹

Key Findings

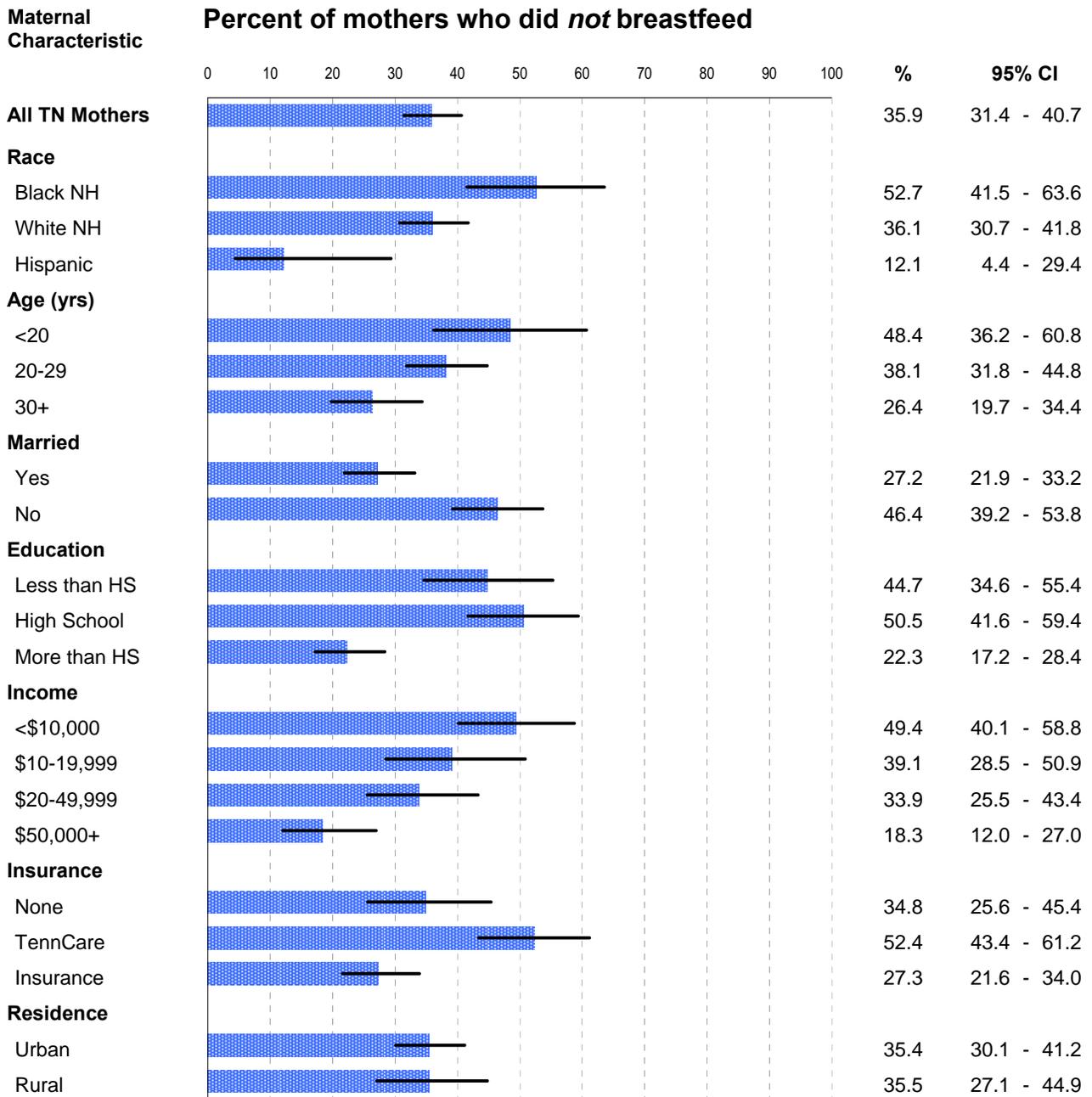
- Approximately one-third (35.9%) of mothers did not breastfeed or pump breast milk to feed their new baby.
- Teens were less likely than older women (30+ years) to breastfeed.
- Unmarried women were less likely than those who were married to breastfeed.
- The most frequently reported reasons for not breastfeeding were not wanting to and not liking breastfeeding.
- The least frequently reported reasons for not breastfeeding were the baby was sick and unable to breastfeed and being embarrassed.
- Women with unintended pregnancies were less likely to initiate breastfeeding than those with intended pregnancies (51.7% vs. 75.8%, respectively).
- Women who smoked at the time of the survey were less likely to have initiated breastfeeding than those who did not smoke (45.1% vs. 71.1%, respectively).



¹ U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Support Breastfeeding. Washington, DC. Department of Health and Human Services, Office of the Surgeon General; 2011.

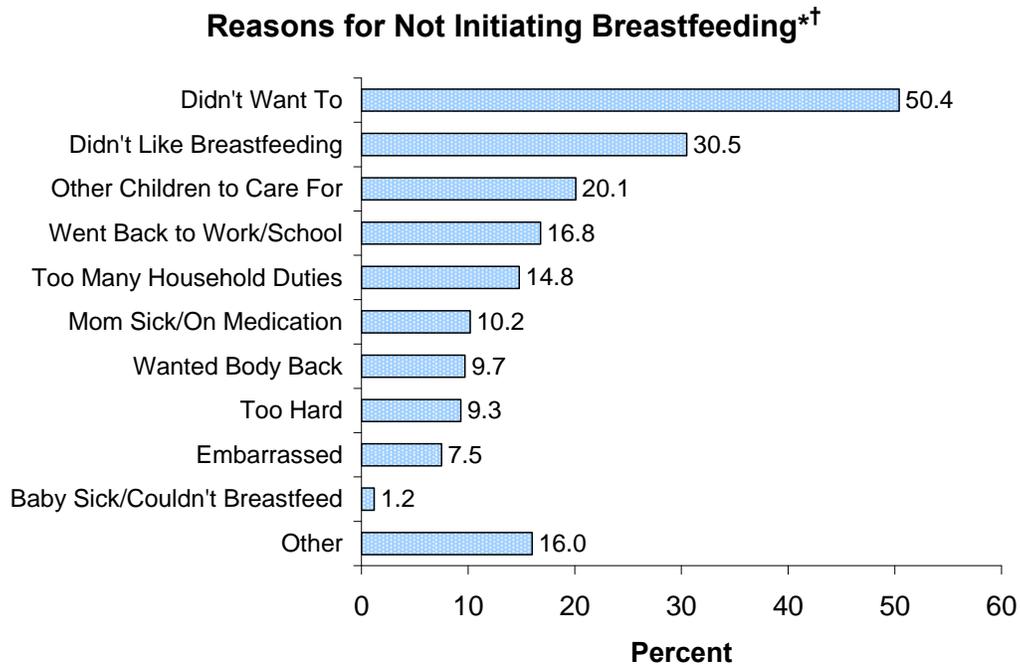
Breastfeeding

Breastfeeding Initiation *cont.*



Breastfeeding

Breastfeeding Initiation *cont.*



* Women may have reported more than one reason for not breastfeeding. Therefore, percentages do not sum to 100%.

† Other reasons for not breastfeeding included "I didn't produce any/enough milk," "My baby didn't like/wouldn't take/refused," "I was smoking," "It hurt/painful/I was afraid of the pain."

Breastfeeding

Breastfeeding Duration

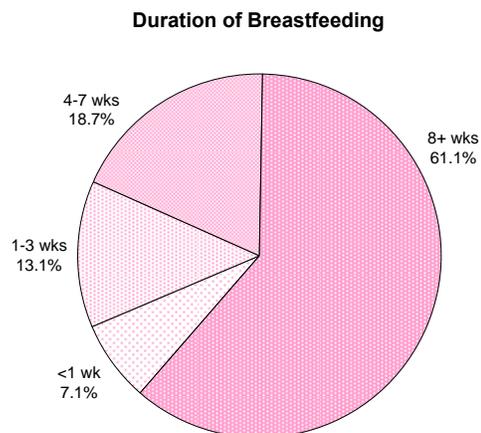
TN PRAMS asks: 1) Are you currently breastfeeding or feeding pumped milk to your new baby? (Q59); 2) How many weeks or months did you breastfeed or pump milk to feed your new baby? (Q60); and 3) What were your reasons for stopping breastfeeding? (Q61). All analyses were limited to women who initiated breastfeeding.

Background

The American Academy of Pediatrics (AAP) recommends that all babies be breastfed exclusively for the first six months of life, and that after solid food is introduced breastfeeding should continue until at least 12 months and as long thereafter as is mutually desired by the mother and child.¹ The AAP also suggests that there is no upper limit to the duration of breastfeeding and no evidence of psychological or developmental harm from breastfeeding into the third year of life or longer.¹ Increased duration of breastfeeding confers significant health and developmental benefits for the child and mother, especially in delaying return to fertility (thereby promoting optimal intervals between births).¹

Key Findings

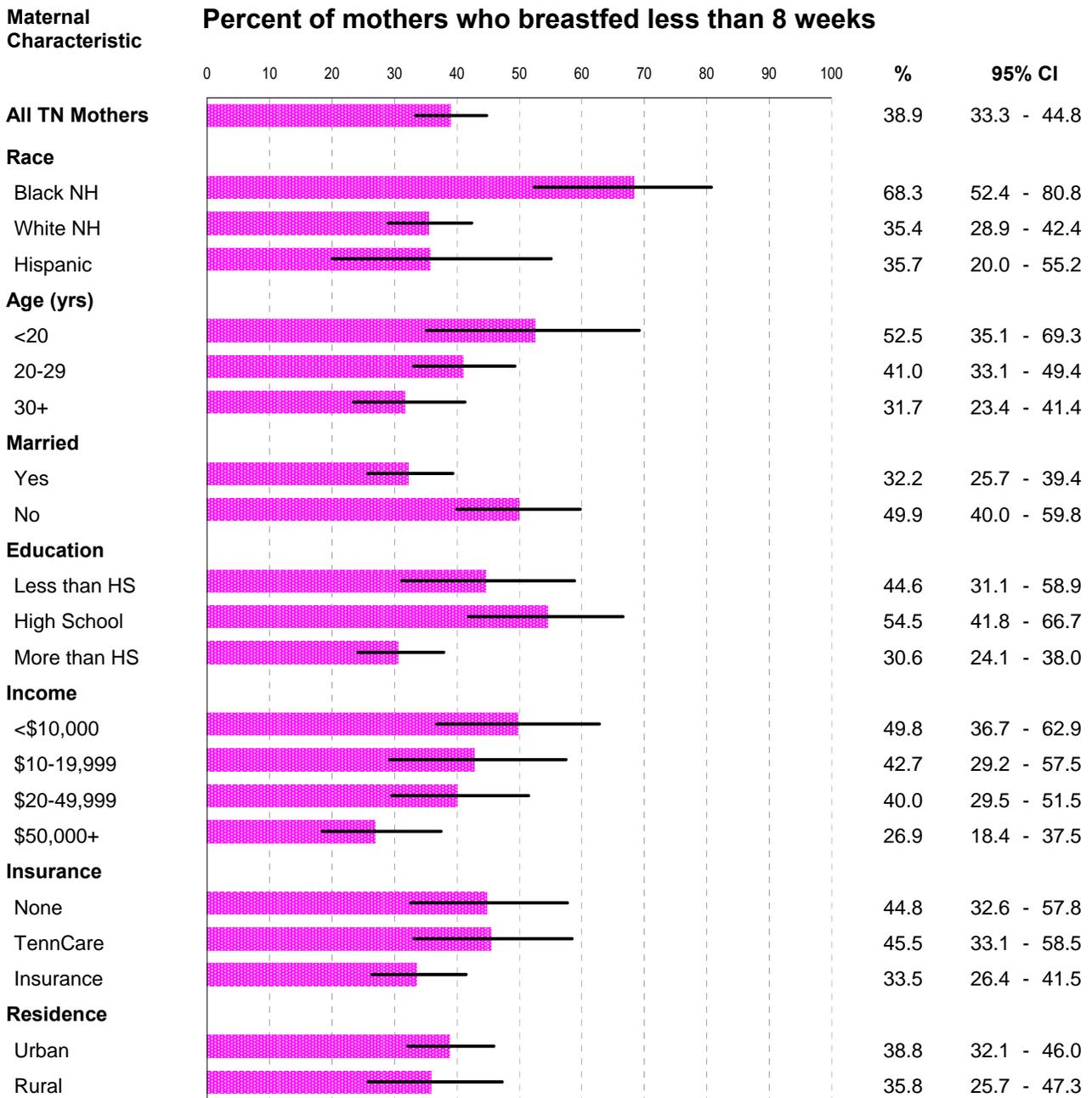
- Among women who initiated breastfeeding, approximately 80% were still breastfeeding at 4 weeks and 61% were still breastfeeding at 8 weeks.
- Approximately 7% of women breastfed for less than 1 week.
- Approximately one-third (38.9%) of women breastfed for less than 8 weeks.
- Black non-Hispanics were more likely to breastfeed less than 8 weeks than white non-Hispanics.
- Unmarried women were more likely than those who were married to breastfeed less than 8 weeks.
- The most frequently reported reasons for stopping breastfeeding were not producing enough milk and milk alone not satisfying baby.
- The least frequently reported reasons for stopping breastfeeding were the mother was sick and the mother felt it was the right time to stop.



¹ Gartner LM, Morton J, Lawrence RA, et al. Breastfeeding and the Use of Human Breast Milk. *Pediatrics* 2005; 115(2):496-506.

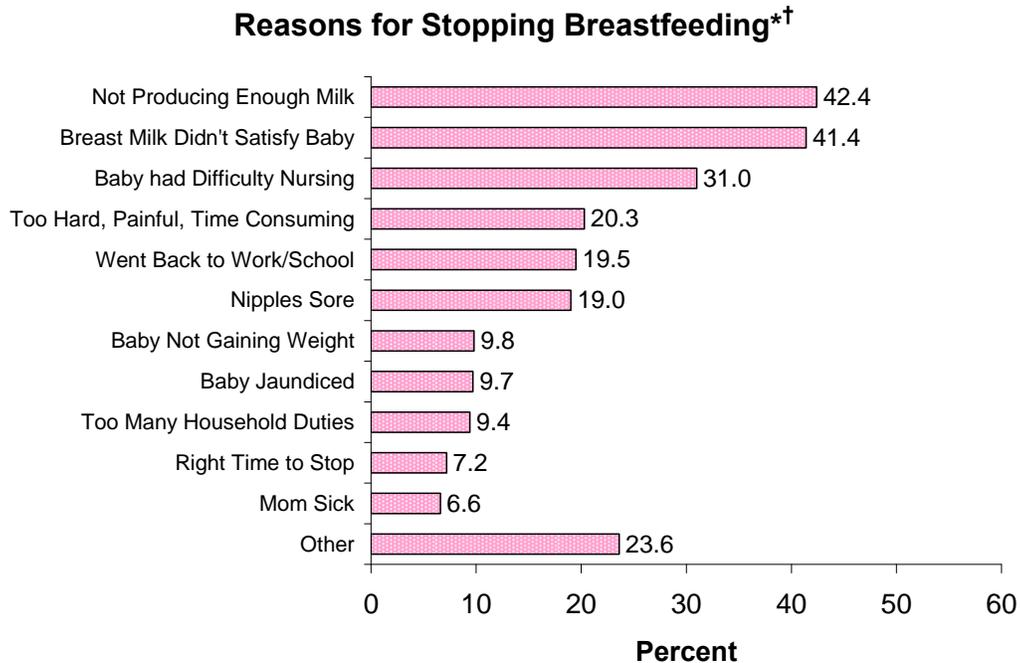
Breastfeeding

Breastfeeding Duration *cont.*



Breastfeeding

Breastfeeding Duration *cont.*



* Women may have reported more than one reason for stopping breastfeeding. Therefore, percentages do not sum to 100%.

† Other reasons for stopping breastfeeding included "I didn't produce any/enough milk/milk dried up," "My baby didn't like/wouldn't take/refused," "I was sick/taking medications/had a breast infection," "I got bored pumping," "Baby was in hospital/NICU."

Breastfeeding

Exclusive Breastfeeding

TN PRAMS asks: 1) How old was your new baby the first time he or she drank liquids other than breast milk (such as formula, water, juice, tea or cow's milk)? (Q62a); and 2) How old was your new baby the first time he or she ate food (such as baby cereal, baby food, or any other food)? (Q62b). All analyses were limited to women who initiated breastfeeding.

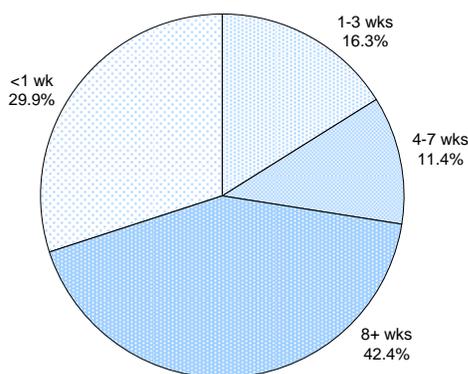
Background

The American Academy of Pediatrics (AAP) recommends that all babies be breastfed exclusively for the first six months of life – that means no supplementation of any type (no water, juice, nonhuman milk, or foods) except for vitamins, minerals and medications.¹ Exclusive breastfeeding is sufficient to support optimal growth and development for the first six months of life, and introducing complimentary foods prior to this age does not increase total caloric intake or growth.¹ Exclusive breastfeeding has been shown to provide improved protection against many diseases and to increase the likelihood of continued breastfeeding for at least the first year of life.¹

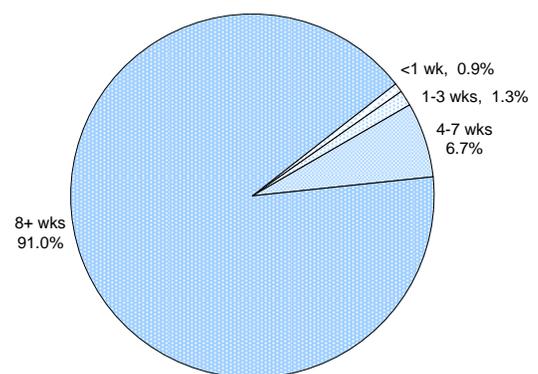
Key Findings

- Among women who initiated breastfeeding, approximately 41% reported that they exclusively breastfed for at least 8 weeks. The remaining 59% of women introduced other liquids or foods prior to 8 weeks (i.e. breastfed exclusively for less than 8 weeks).
- Approximately 58% of women introduced liquids other than breast milk prior to 8 weeks.
- Approximately 9% of women introduced foods other than breast milk prior to 8 weeks.
- There were no statistically significant differences in the percentage of mothers who breastfed exclusively for less than 8 weeks across demographic and socioeconomic subgroups.

Infant Age When Other Liquids First Introduced



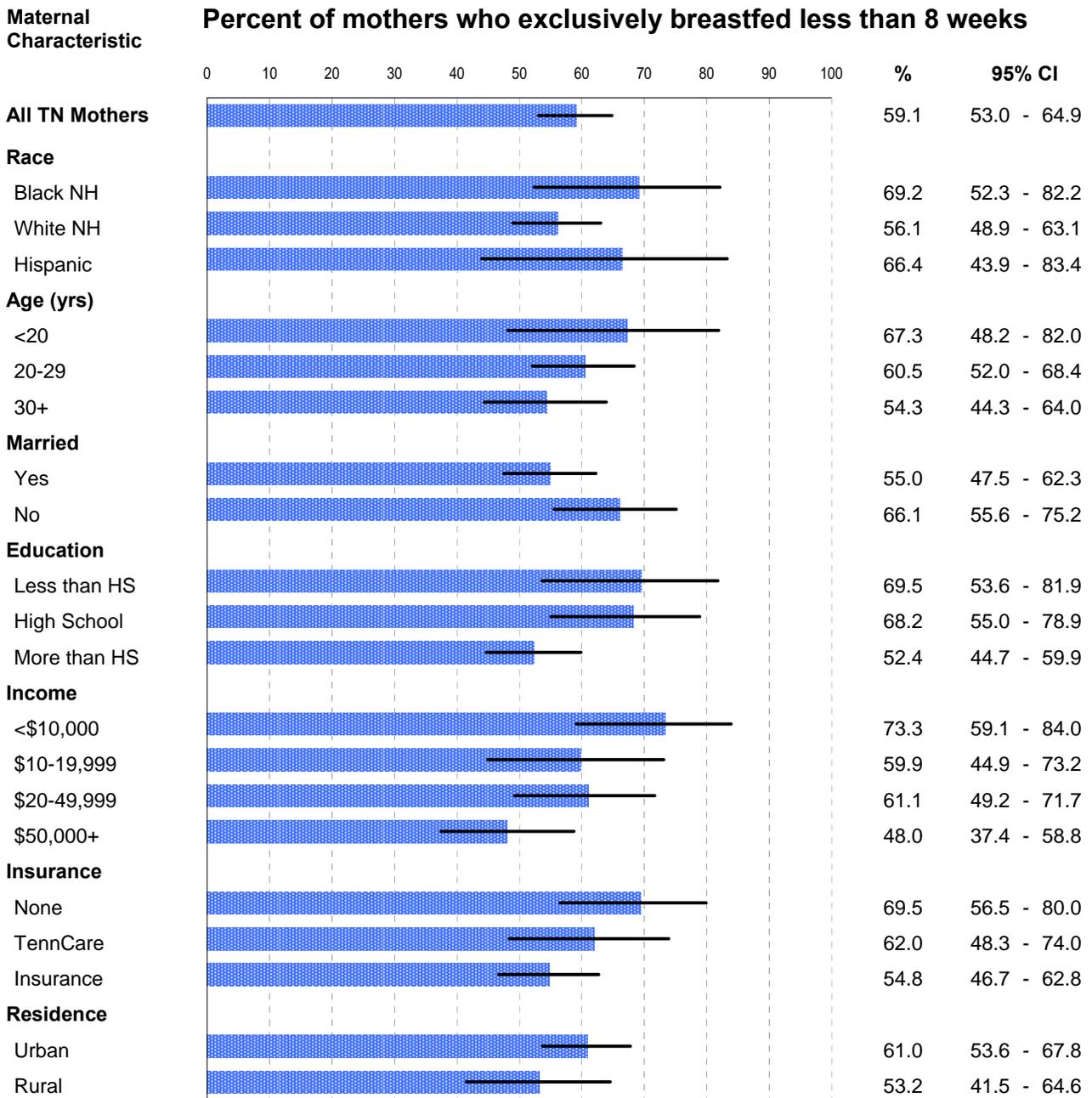
Infant Age When Other Foods First Introduced



¹ Gartner LM, Morton J, Lawrence RA, et al. Breastfeeding and the Use of Human Breast Milk. *Pediatrics* 2005; 115(2):496-506.

Breastfeeding

Exclusive Breastfeeding *cont.*



Infant Health and Safety

Infant Health Checkups

Sleep Position

Bed Sharing

Secondhand Smoke Exposure

Injury Prevention

Infant Health and Safety

Infant Health Checkups

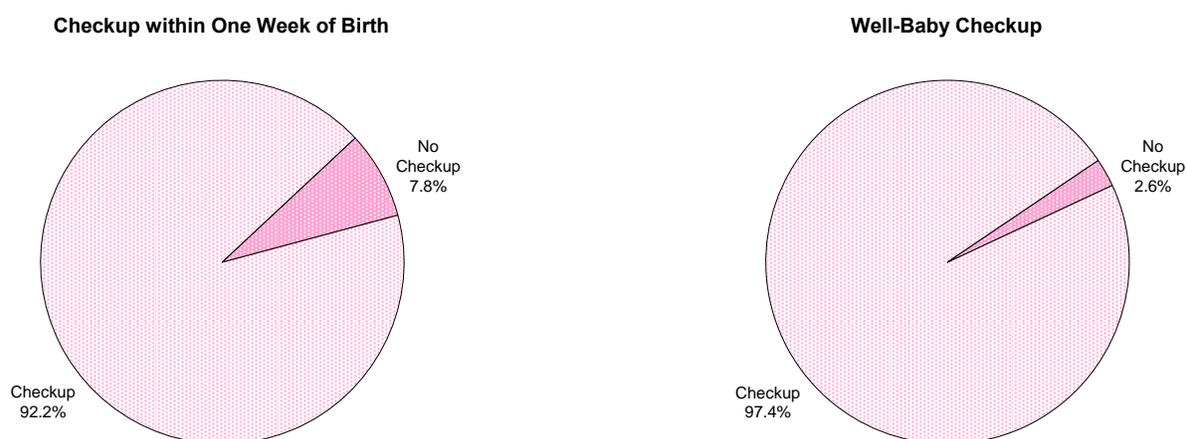
TN PRAMS asks: 1) Was your new baby seen by a doctor, nurse or other health care provider for a one-week checkup after he or she was born? (Q65); and 2) Has your baby had a well-baby checkup? (A well-baby checkup is a regular health visit for your baby usually at 1, 2, 4 and 6 months of age.) (Q61). All analyses were limited to women whose infants were still alive and living with them.

Background

Most babies have their first checkup within the first few days or weeks of birth, and thereafter at least every two months during the first six months of life.¹ The purpose of these early checkups is to make sure a baby is growing and developing properly and has no serious problems.¹ Common parts of any well-baby checkup include: measurement of weight, length and head circumference to assess growth; physical exam; observation of vision, hearing and reflexes; questions about the baby's eating and sleeping habits; general discussions and advice about infant health and safety; and immunizations.^{1,2} Well-baby checkups are an important part of preventive care and recommended for all infants even if they are doing well and are not sick.¹

Key Findings

- The majority of mothers reported that their baby had both a one-week checkup and at least one well-baby visit – just 7.8% reported no one-week checkup and 2.6% reported no well-baby visit.
- With the exception of black non-Hispanics, at least 90% of mothers in all demographic and socioeconomic subgroups reported having a one-week checkup.
- At least 94% of mothers in all demographic and socioeconomic subgroups reported having a well-baby checkup.
- There were no statistically significant differences in the prevalence of one-week and well-baby checkups by delivery insurance source or by infant insurance source (data not shown).

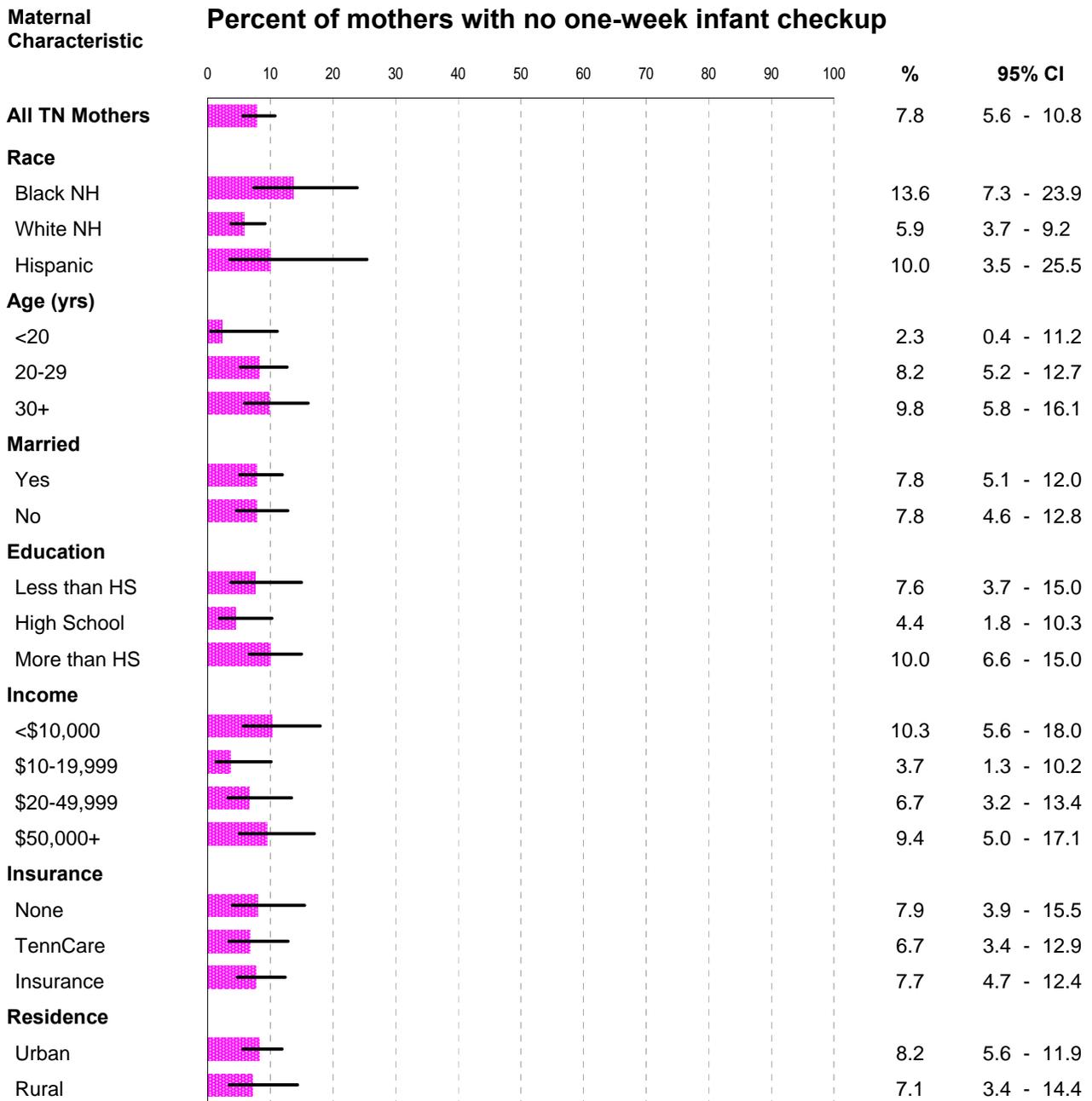


¹ March of Dimes. *Well Baby Care*. Accessed August 2011 at <http://www.marchofdimes.com/baby/wellbabycare.html>.

² KidsHealth.org. *Medical Care and Your Newborn*. Accessed August 2011 at <http://kidshealth.org/parent/growth/medical/mednewborn.html>.

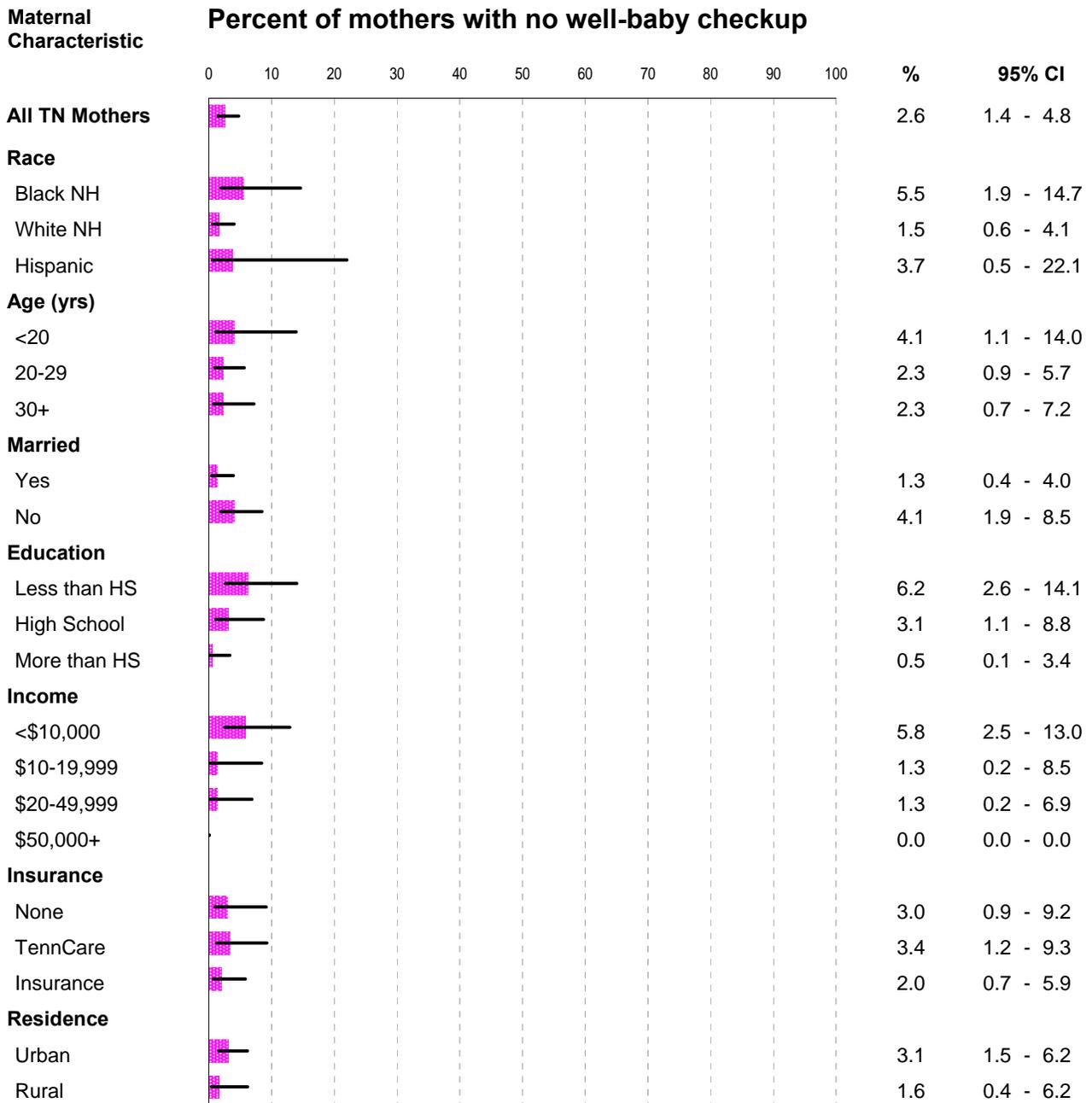
Infant Health and Safety

Infant Health Checkups *cont.*



Infant Health and Safety

Infant Health Checkups *cont.*



Infant Health and Safety

Sleep Position

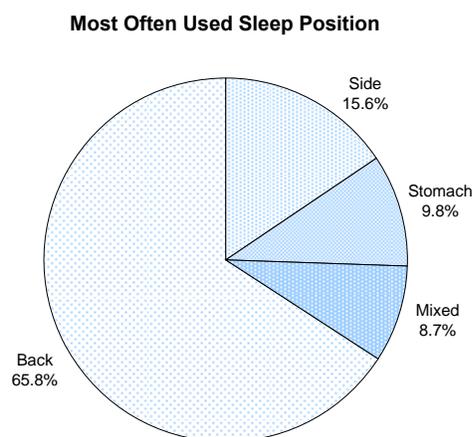
TN PRAMS asks: *In which position do you most often lay your baby to sleep now? (Q63).* All analyses were limited to women whose infants were still alive and living with them.

Background

Sudden infant death syndrome (SIDS) is the leading cause of death among Tennessee infants between the ages of one month and one year.¹ Many of these deaths are preventable. Placing a baby on his or her back to sleep can significantly reduce the risk of SIDS – babies should always be placed on their backs to sleep, both at nighttime and for naps.^{2,3} In addition to the back sleeping position, other preventive measures include: placing baby to sleep on a firm surface covered by a fitted sheet; keeping soft objects, toys, bumper pads and loose bedding out of baby’s sleep area; keeping baby’s sleep area close to, but separate from, where adults sleep; not letting baby overheat during sleep; and avoiding exposure of baby to tobacco smoke.^{2,3} These measures not only reduce the risk of SIDS, but can reduce the risk of other sleep-related deaths as well.³

Key Findings

- Over one-third of women (34.2%) most often used the side, stomach or a mixture of positions to lay their baby to sleep instead of using the back position.
- Black non-Hispanics were less likely than white non-Hispanics to use the back sleep position.
- Unmarried women were less likely to use the back sleep position than those who were married.
- Women with unintended pregnancies were more likely to use non-back sleep positions than those with intended pregnancies (41.2% vs. 28.3%, respectively).
- Women with late or no prenatal care were more likely to use non-back sleep positions than those with early care (47.7% vs. 31.1%, respectively).
- There were no statistically significant differences in sleep position by infant birthweight, breastfeeding, postpartum depression, maternal postpartum checkup, or well-baby checkup (data not shown).



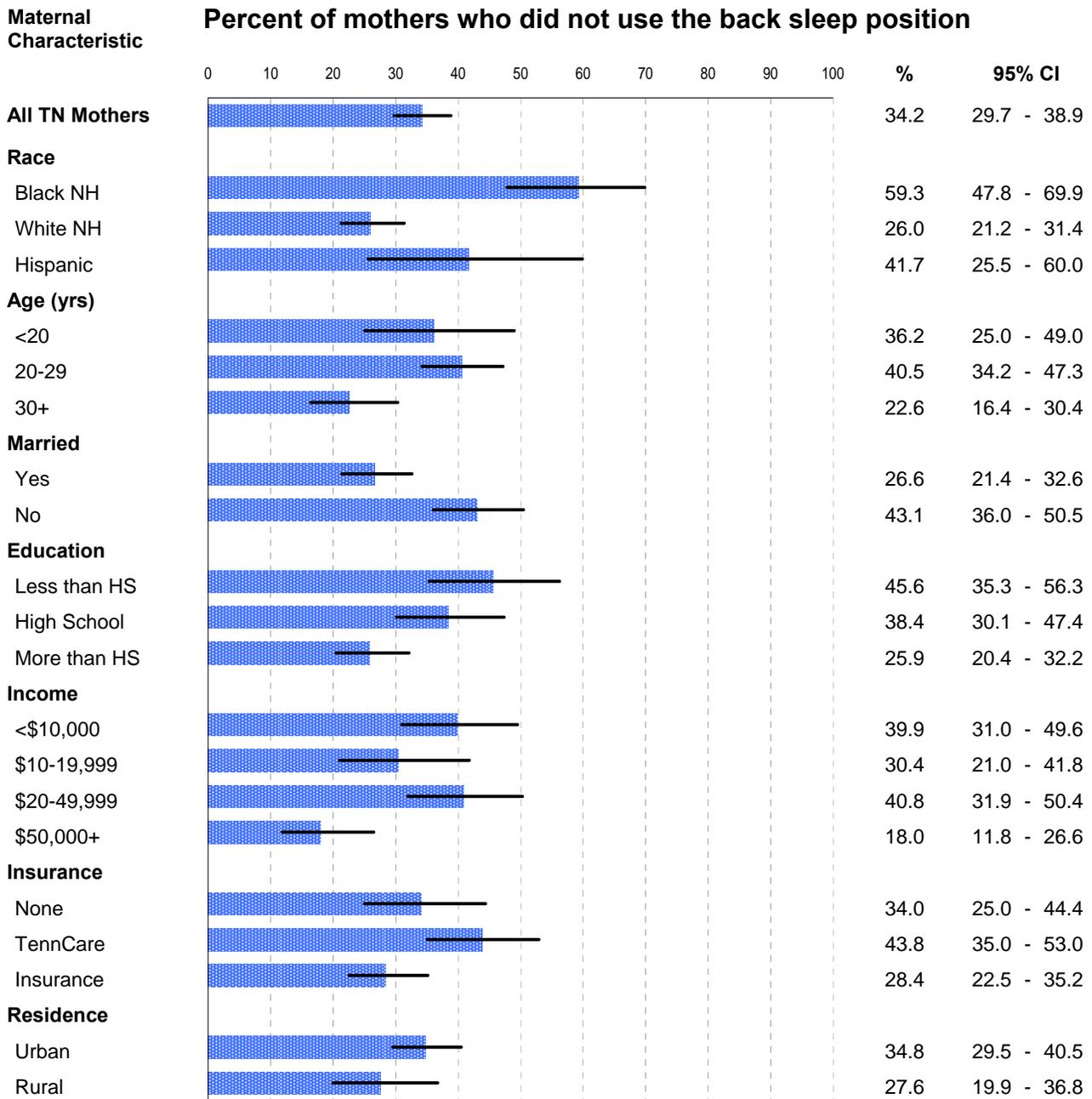
¹ Tennessee Department of Health; Division of Health Statistics; Death Statistical System.

² Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH, DHHS. (2005). *Safe Sleep for Your Baby: Reduce the Risk of Sudden Infant Death Syndrome (SIDS)--General Outreach (05-7040)*. Washington, DC: U.S. Government Printing Office.

³ American Academy of Pediatrics, Task Force on SIDS. SIDS and Other Sleep-Related Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment. *Pediatrics* 2011; 128(5):1030-1039.

Infant Health and Safety

Sleep Position *cont.*



Infant Health and Safety

Bed Sharing

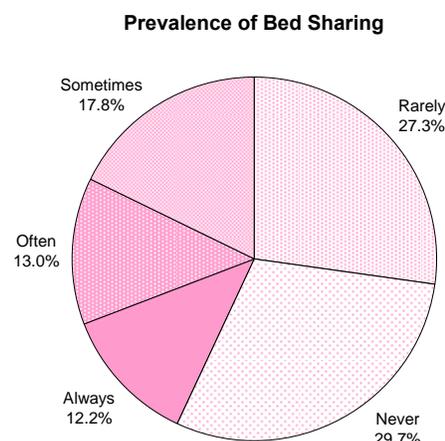
TN PRAMS asks: *How often does your new baby sleep in the same bed with you or anyone else? (Q64).* Women who reported that their new baby always, often or sometimes slept in the same bed were classified as bed sharing with their infant. All analyses were limited to women whose infants were still alive and living with them.

Background

Accidental suffocation and strangulation is the leading cause of accidental infant deaths in Tennessee, with approximately two-thirds of these deaths occurring in a bed.¹ The American Academy of Pediatrics does not recommend bed sharing between infants and adults, where infants may be suffocated and/or strangled by soft bedding; by an adult rolling on top or against them; or by becoming wedged or trapped between the mattress and headboard, wall or other object.^{2,3} An infant should sleep in the same room as an adult but in their own crib.² This arrangement reduces the risk of suffocation, strangulation and entrapment that can occur when an infant sleeps in the same bed as an adult, and can also reduce the risk of sudden infant death syndrome (SIDS).²

Key Findings

- Over two-fifths of women (43.0%) often, always or sometimes shared a bed with their infant.
- Black non-Hispanics were over twice as likely as white non-Hispanics to bed share.
- Unmarried women were more likely to bed share than those who were married.
- Women with late or no prenatal care were more likely to bed share than those with early care (55.3% vs. 39.3%, respectively).
- There were no statistically significant differences in sleep position by pregnancy intent, infant birthweight, breastfeeding, postpartum depression, maternal postpartum checkup, or well-baby checkup (data not shown).



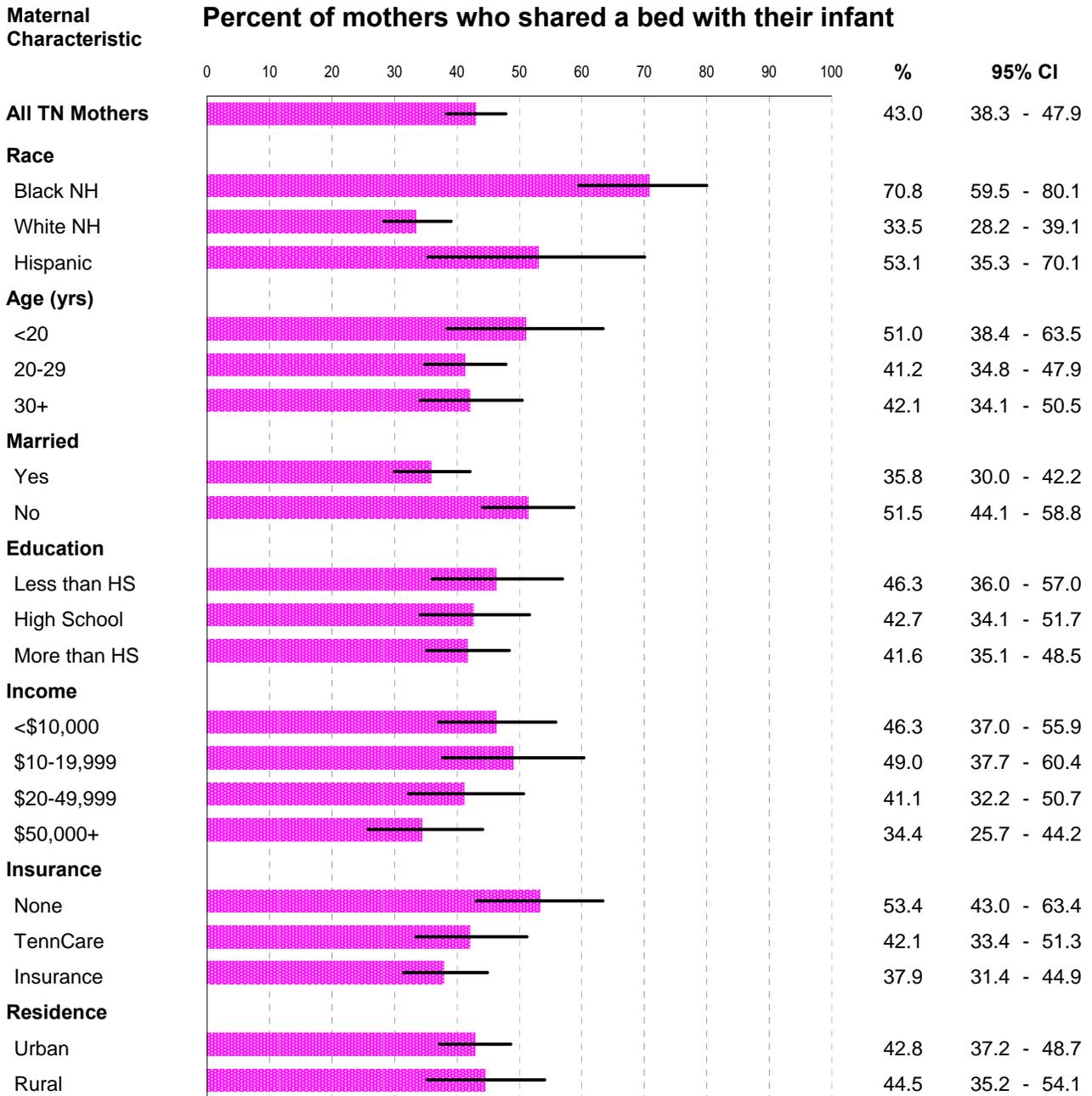
¹ Tennessee Department of Health; Division of Health Statistics; Death Statistical System.

² American Academy of Pediatrics, Task Force on SIDS. SIDS and Other Sleep-Related Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment. *Pediatrics* 2011; 128(5):1030-1039.

³ KidsHealth.org. *Cosleeping and Your Baby*. Accessed August 2011 at <http://kidshealth.org/parent/general/sleep/cosleeping.html>.

Infant Health and Safety

Bed Sharing *cont.*



Infant Health and Safety

Secondhand Smoke Exposure

TN PRAMS asks: *About how many hours a day, on average, is your new baby in the same room or vehicle with someone who is smoking? (Q80).* Women who reported that their infant was in the same room or vehicle as a smoker for any amount of time (even less than one hour per day) were classified as having an infant exposed to secondhand smoke. All analyses were limited to women whose infants were still alive and living with them.

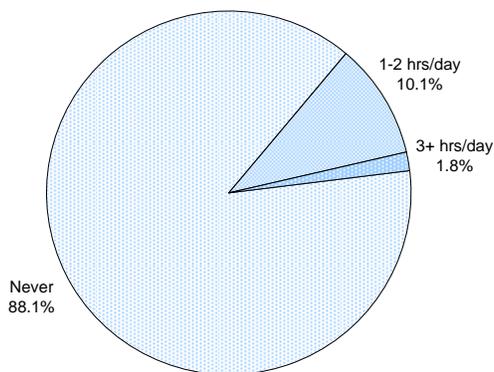
Background

Because their bodies are still developing, infants and children are especially vulnerable to the poisons in secondhand smoke.¹ Both babies whose mothers smoke while pregnant and those who are exposed to secondhand smoke after birth are more likely to die of SIDS than babies not exposed to smoke.¹ They also have weaker lungs and slower lung growth, which increases the risk of many health conditions.¹ Secondhand smoke causes bronchitis and pneumonia among children, increases the risk of ear infections, and can cause children with asthma to experience more frequent and severe attacks.¹ There is no risk-free level of exposure to secondhand smoke for infants, children or adults.¹

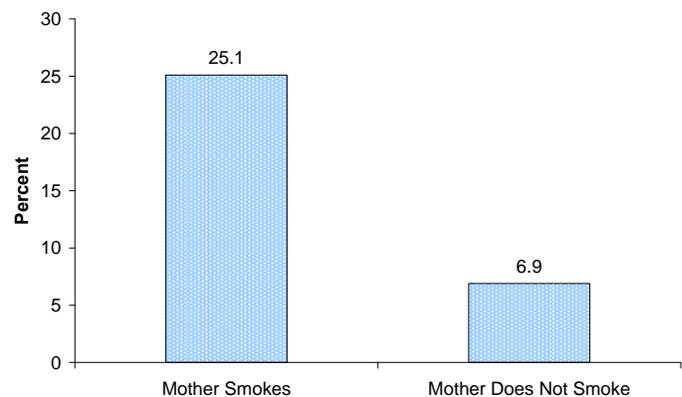
Key Findings

- Approximately 12% of mothers reported that their infants were exposed to secondhand smoke.
- Teens were more likely than older women (30+ years) to have an infant exposed to secondhand smoke.
- Infant exposure to secondhand smoke was higher among women who reported smoking cigarettes at the time of the survey than among those who did not smoke.

Infant Exposure to Secondhand Smoke



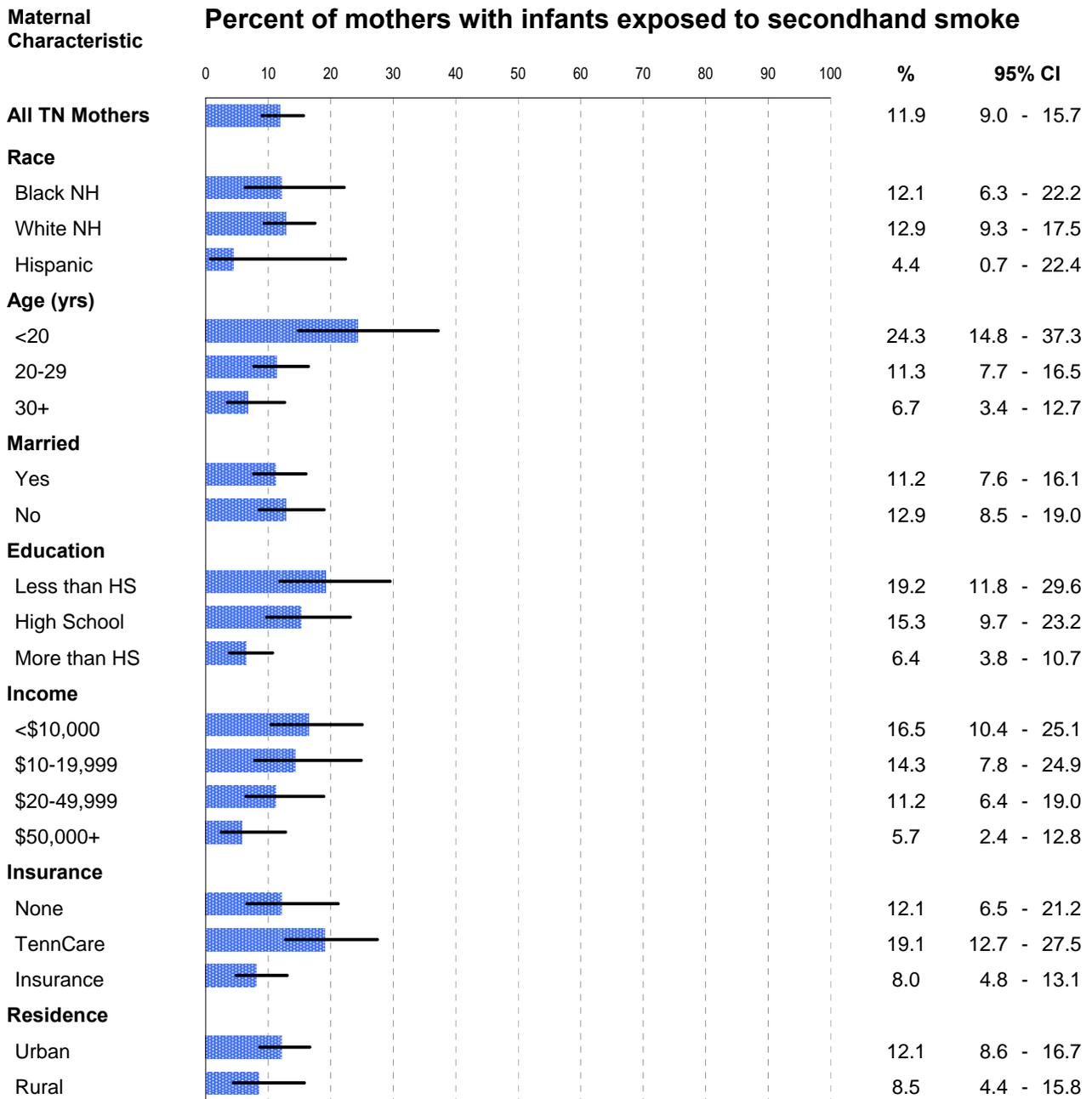
Infant Smoke Exposure by Maternal Smoking Status



¹ US Department of Health and Human Services. *Children and Secondhand Smoke Exposure. Excerpts from The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General.* Atlanta, GA: USDHHS, CDC, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2007.

Infant Health and Safety

Secondhand Smoke Exposure *cont.*



Infant Health and Safety

Injury Prevention

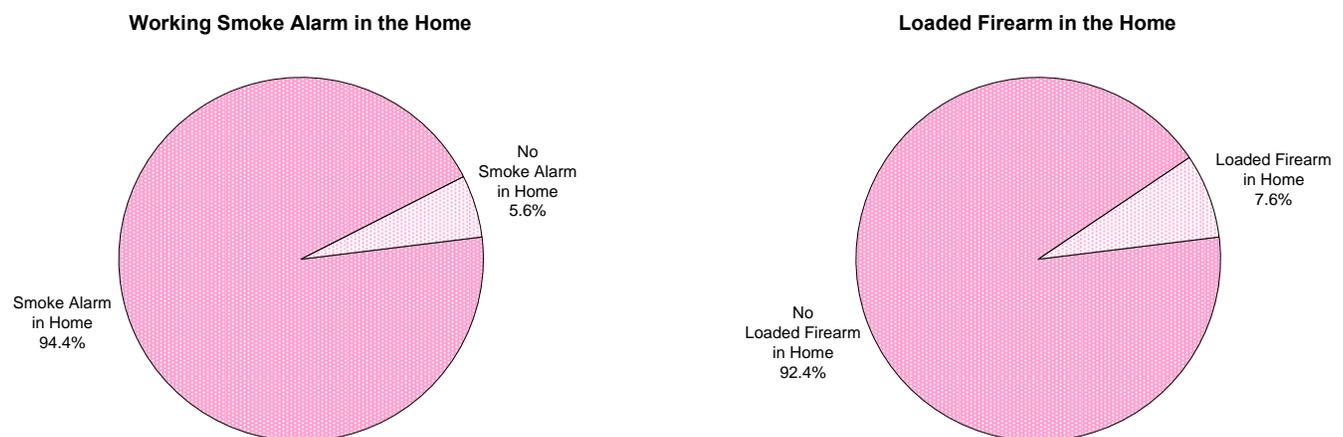
TN PRAMS asks women whether or not certain statements regarding infant safety apply to them (Q78a-d). Specifically, women are asked about car seat use, smoke alarms in the home and loaded firearms in the home. All analyses were limited to women whose infants were still alive and living with them.

Background

Although largely preventable, unintentional injuries are a major cause of morbidity and mortality among children and adolescents, and are the fourth leading cause of infant mortality in Tennessee.¹ However, there are many steps parents can take to provide a safe environment for their babies and avoid these injuries. These steps include always using an appropriate and properly installed child safety seat when traveling by car; installing smoke alarms on every level of the home and in every bedroom; and storing guns unloaded, in a locked case and with the ammunition kept separately.² The American Academy of Pediatrics provides extensive information on these and other infant safety topics at their Healthy Children website.²

Key Findings

- One-hundred percent of mothers reported using a car seat to bring their infant home from the hospital and always or almost always using an infant car seat.
- Approximately 6% of women did not have a working smoke alarm in the home.
- Approximately 8% of women had a loaded gun, rifle or other firearm in the home.
 - White non-Hispanics were more likely than black non-Hispanics to have a loaded gun.
 - Unmarried women were more likely to have a loaded gun than those who were married.

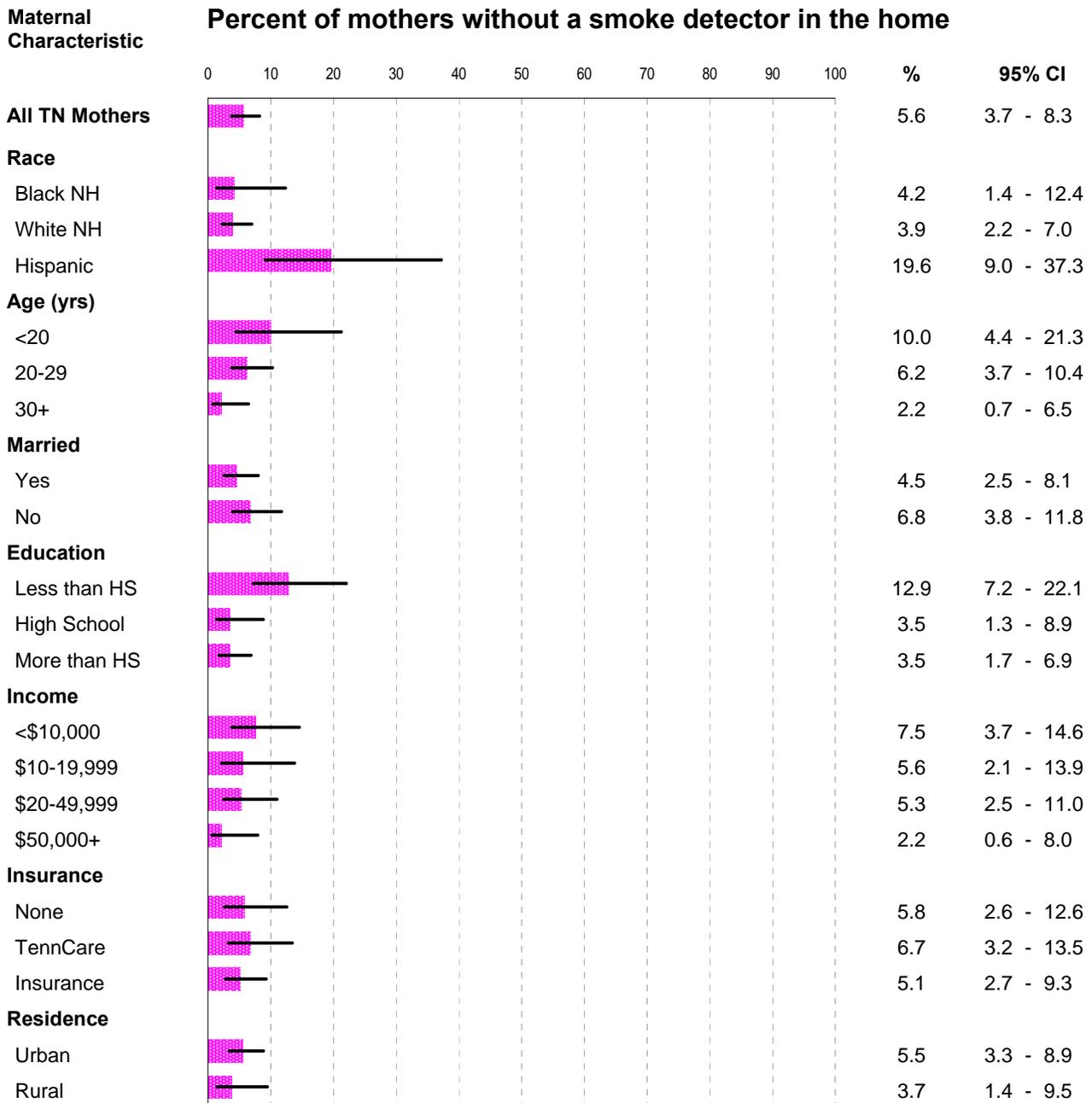


¹ Borse NN, Gilchrist J, Dellinger AM, et al. *CDC Childhood Injury Report: Patterns of Unintentional Injuries among 0 -19 Year Olds in the United States, 2000-2006*. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2008.

² American Academy of Pediatrics Healthy Children Safety and Prevention website. Accessed August 2011 at <http://www.healthychildren.org/English/safety-prevention/Pages/default.aspx>.

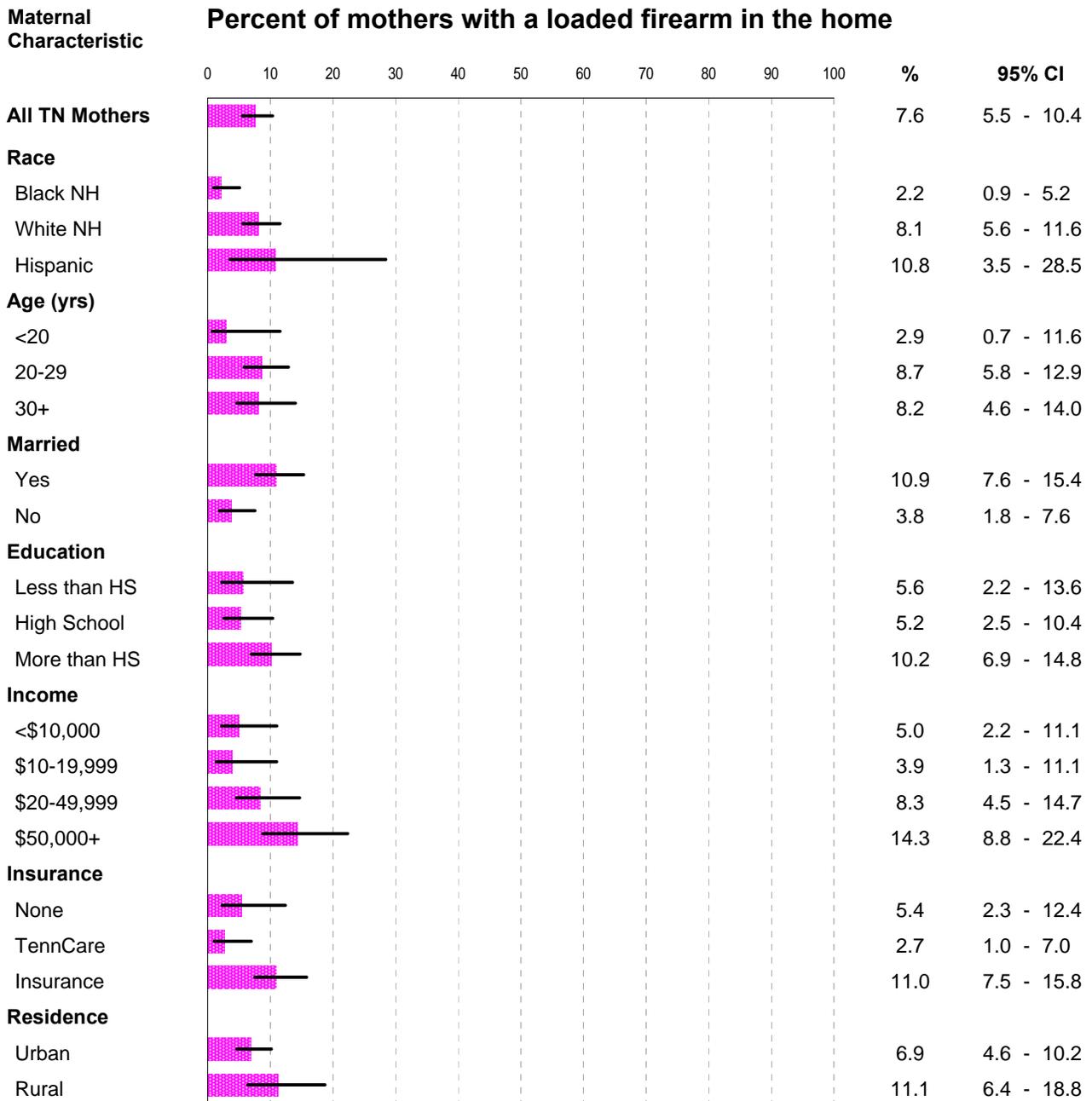
Infant Health and Safety

Injury Prevention *cont.*



Infant Health and Safety

Injury Prevention *cont.*



Appendix

2009 TN PRAMS Questionnaire

PRAMS

Tennessee Pregnancy Risk Assessment Monitoring System

*A Survey of the Health of
Mothers and Babies
in Tennessee*

*For further information,
please call toll-free
1-877-984-8662*




Tennessee Department of Health
Office of Policy, Planning and Assessment
425 5th Avenue North, 4th Floor
Nashville, Tennessee 37243



Please mark your answers. Follow the directions included with the questions. If no directions are presented, check the box next to your answer or fill in the blanks. Because not all questions will apply to everyone, you may be asked to skip certain questions.

BEFORE PREGNANCY

First, we would like to ask a few questions about *you* and the time *before* you got pregnant with your new baby.

1. At any time during the 12 months before you got pregnant with your new baby, did you do any of the following things? For each item, circle Y (Yes) if you did it or circle N (No) if you did not.

	No	Yes
a. I was dieting (changing my eating habits) to lose weight	N	Y
b. I was exercising 3 or more days of the week	N	Y
c. I was regularly taking prescription medicines other than birth control . . .	N	Y
d. I visited a health care worker to be checked or treated for diabetes. . .	N	Y
e. I visited a health care worker to be checked or treated for high blood pressure.	N	Y
f. I visited a health care worker to be checked or treated for depression or anxiety	N	Y
g. I talked to a health care worker about my family medical history . . .	N	Y
h. I had my teeth cleaned by a dentist or dental hygienist.	N	Y

2. During the *month before* you got pregnant with your new baby, were you covered by any of these health insurance plans?

Check all that apply

- Health insurance from your job or the job of your husband, partner, or parents
- Health insurance that you or someone else paid for (not from a job)
- Medicaid
- TRICARE or other military health care
- TennCare
- CoverKids
- CoverTN
- Other source(s) —————> Please tell us:
- I did not have any health insurance before I got pregnant

3. During the *month before* you got pregnant with your new baby, how many times a week did you take a multivitamin, a prenatal vitamin, or a folic acid vitamin?

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

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

____ Pounds **OR** ____ Kilos

5. How tall are you without shoes?

____ Feet ____ Inches
OR ____ Meters

6. What is *your* date of birth?

	/		/	19
Month		Day		Year

7. Would you say that, in general, your health is—

- Excellent
- Very good
- Good
- Fair
- Poor

8. Before you got pregnant with your new baby, did a doctor, nurse, or other health care worker talk with you about how to prepare for a healthy pregnancy and baby?

- No
- Yes

9. Before you got pregnant with your new baby, were you ever told by a doctor, nurse, or other health care worker that you had Type 1 or Type 2 diabetes? This is not the same as gestational diabetes or diabetes that starts during pregnancy.

- No
- Yes

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

- No → Go to Question 14
- Yes

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

- No
- Yes

12. Was the baby *just before* your new one born *more* than 3 weeks before his or her due date?

- No
- Yes

13. When your new baby was born, how old was the child born *just before* your new baby?

- 0 to 12 months
- 13 to 18 months
- 19 to 24 months
- More than 2 years but less than 3 years
- 3 to 5 years
- More than 5 years

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

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

Check one answer

- I wanted to be pregnant sooner
- I wanted to be pregnant later
- I wanted to be pregnant then
- I didn't want to be pregnant then or at any time in the future

If you wanted to be pregnant later, answer Question 15. Otherwise, go to Question 16.

15. How much later did you want to become pregnant?

- Less than 1 year
- 1 year to less than 2 years
- 2 years to less than 3 years
- 3 years to less than 4 years
- 4 years or more

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

No

Yes → **Go to Page 4, Question 20**

17. When you got pregnant with your new baby, were you or your husband or partner doing anything to keep from getting pregnant? (Some things people do to keep from getting pregnant include not having sex at certain times [natural family planning or rhythm] or withdrawal, and using birth control methods such as the pill, condoms, vaginal ring, IUD, having their tubes tied, or their partner having a vasectomy.)

No

Yes → **Go to Question 19**

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

Check all that apply

- I didn't mind if I got pregnant
- I thought I could not get pregnant at that time
- I had side effects from the birth control method I was using
- I had problems getting birth control when I needed it
- I thought my husband or partner or I was sterile (could not get pregnant at all)
- My husband or partner didn't want to use anything
- Other → Please tell us:

If you or your husband or partner was not doing anything to keep from getting pregnant, go to Page 4, Question 20.

19. When you got pregnant with your new baby, what were you or your husband or partner using to keep from getting pregnant?

Check all that apply

- Tubes tied or closed (female sterilization)
- Vasectomy (male sterilization)
- Pill
- Condoms
- Injection once every 3 months (Depo-Provera[®])
- Contraceptive implant (Implanon[®])
- Contraceptive patch (OrthoEvra[®])
- Diaphragm, cervical cap, or sponge
- Vaginal ring (NuvaRing[®])
- IUD (including Mirena[®])
- Rhythm method or natural family planning
- Withdrawal (pulling out)
- Not having sex (abstinence)
- Emergency contraception (The "morning-after" pill)
- Other → Please tell us:

DURING PREGNANCY

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

20. How many weeks or months pregnant were you when you were *sure* you were pregnant? (For example, you had a pregnancy test or a doctor or nurse said you were pregnant.)

Weeks **OR** Months

I don't remember

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

{ Weeks **OR** Months

I didn't go for prenatal care

Go to Question 23

Go to Question 22

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

- No
- Yes

Go to Question 24

23. Did any of these things keep you from getting prenatal care at all or as early as you wanted? For each item, circle **T** (True) if it was a reason that you didn't get prenatal care when you wanted or circle **F** (False) if it was not a reason for you or if something does not apply to you.

	True	False
a. I couldn't get an appointment when I wanted one	T	F
b. I didn't have enough money or insurance to pay for my visits	T	F
c. I had no transportation to get to the clinic or doctor's office	T	F
d. The doctor or my health plan would not start care as early as I wanted	T	F
e. I had too many other things going on	T	F
f. I couldn't take time off from work or school.	T	F
g. I didn't have my TennCare/ CoverKids/CoverTN/ Medicaid card.	T	F
h. I had no one to take care of my children.	T	F
i. I didn't know that I was pregnant	T	F
j. I didn't want anyone else to know I was pregnant	T	F
k. I didn't want prenatal care	T	F

If you did not go for prenatal care, go to Page 6, Question 26.

24. Did any of these health insurance plans help you pay for your prenatal care?

Check all that apply

- Health insurance from your job or the job of your husband, partner, or parents
- Health insurance that you or someone else paid for (not from a job)
- Medicaid
- TRICARE or other military health care
- TennCare
- CoverKids
- CoverTN
- Other source(s) —————> Please tell us:
- I did not have health insurance to help pay for my prenatal care

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

	No	Yes
a. How smoking during pregnancy could affect my baby.	N	Y
b. Breastfeeding my baby	N	Y
c. How drinking alcohol during pregnancy could affect my baby.	N	Y
d. Using a seat belt during my pregnancy	N	Y
e. Medicines that are safe to take during my pregnancy	N	Y
f. How using illegal drugs could affect my baby.	N	Y
g. Doing tests to screen for birth defects or diseases that run in my family	N	Y
h. The signs and symptoms of preterm labor (labor more than 3 weeks before the baby is due).	N	Y
i. What to do if my labor starts early	N	Y
j. Getting tested for HIV (the virus that causes AIDS)	N	Y
k. What to do if I feel depressed during my pregnancy or after my baby is born	N	Y
l. Physical abuse to women by their husbands or partners	N	Y

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

- No
- Yes → **Go to Question 28**
- I don't know

27. Were you offered an HIV test during your most recent pregnancy or delivery?

- No
- Yes

28. Have you ever heard or read that taking a vitamin with folic acid can help prevent some birth defects?

- No → **Go to Question 30**
- Yes

29. Have you ever heard about folic acid from any of the following?

Check all that apply

- Magazine or newspaper article
- Radio or television
- Doctor, nurse, or other health care worker
- Book
- Family or friends
- Other → Please tell us:

30. Did you get a flu vaccination during your most recent pregnancy?

- No
- Yes

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

- No
- Yes

32. During your most recent pregnancy, were you told by a doctor, nurse, or other health care worker that you had gestational diabetes (diabetes that started during this pregnancy)?

- No
- Yes

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

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

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

34. Have you smoked any cigarettes in the past 2 years?

- No → **Go to Question 38**
- Yes

35. In the 3 months before you got pregnant, how many cigarettes did you smoke on an average day? (A pack has 20 cigarettes.)

- 41 cigarettes or more
- 21 to 40 cigarettes
- 11 to 20 cigarettes
- 6 to 10 cigarettes
- 1 to 5 cigarettes
- Less than 1 cigarette
- I didn't smoke then

36. In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average day? (A pack has 20 cigarettes.)

- 41 cigarettes or more
- 21 to 40 cigarettes
- 11 to 20 cigarettes
- 6 to 10 cigarettes
- 1 to 5 cigarettes
- Less than 1 cigarette
- I didn't smoke then

37. How many cigarettes do you smoke on an average day now? (A pack has 20 cigarettes.)

- 41 cigarettes or more
- 21 to 40 cigarettes
- 11 to 20 cigarettes
- 6 to 10 cigarettes
- 1 to 5 cigarettes
- Less than 1 cigarette
- I don't smoke now

38. Which of the following statements best describes the rules about smoking inside your home now?

Check one answer

- No one is allowed to smoke anywhere inside my home
- Smoking is allowed in some rooms or at some times
- Smoking is permitted anywhere inside my home

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

39. Have you had any alcoholic drinks in the past 2 years? A drink is 1 glass of wine, wine cooler, can or bottle of beer, shot of liquor, or mixed drink.

- No → **Go to Page 8, Question 42**
- Yes

Go to Page 8, Question 40a

40a. During the 3 months before you got pregnant, how many alcoholic drinks did you have in an average week?

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

Go to Question 41a

40b. During the 3 months before you got pregnant, how many times did you drink 4 alcoholic drinks or more in one sitting?
A sitting is a two hour time span.

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

41a. During the last 3 months of your pregnancy, how many alcoholic drinks did you have in an average week?

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

Go to Question 42

41b. During the last 3 months of your pregnancy, how many times did you drink 4 alcoholic drinks or more in one sitting?
A sitting is a two hour time span.

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

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

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

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

43. During the 12 months before your new baby was born, did you ever eat less than you felt you should because there wasn't enough money to buy food?

- No
- Yes

44. During the 12 months before your new baby was born, how often did you feel unsafe in the neighborhood where you lived?

- Always
 Often
 Sometimes
 Rarely
 Never

45. During the 12 months before your new baby was born, did you feel emotionally upset (for example, angry, sad, or frustrated) as a result of how you were treated based on your race?

- No
 Yes

46. During the 12 months before you got pregnant with your new baby, did your husband or partner push, hit, slap, kick, choke, or physically hurt you in any other way?

- No
 Yes

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

- No
 Yes

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

48. When was your baby due?

/ / 20
 Month Day Year

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

/ / 20
 Month Day Year

I didn't have my baby in a hospital

50. When was your baby born?

/ / 20
 Month Day Year

51. When were you discharged from the hospital after your baby was born?

/ / 20
 Month Day Year

I didn't have my baby in a hospital

52. Did any of these health insurance plans help you pay for the *delivery* of your new baby?

Check all that apply

- Health insurance from your job or the job of your husband, partner, or parents
- Health insurance that you or someone else paid for (not from a job)
- Medicaid
- TRICARE or other military health care
- TennCare
- CoverKids
- CoverTN
- Other source(s) → Please tell us:

- I did not have health insurance to help pay for my delivery

AFTER PREGNANCY

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

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

- No
- Yes
- I don't know

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

- Less than 24 hours (less than 1 day)
- 24 to 48 hours (1 to 2 days)
- 3 to 5 days
- 6 to 14 days
- More than 14 days
- My baby was not born in a hospital
- My baby is still in the hospital → **Go to Question 57**

Go to Question 55

55. Is your baby alive now?

- No → **Go to Page 12, Question 69**
- Yes

56. Is your baby living with you now?

- No → **Go to Page 12, Question 69**
- Yes

57. Did you ever breastfeed or pump breast milk to feed your new baby after delivery, even for a short period of time?

- No
- Yes → **Go to Question 59**

58. What were your reasons for not breastfeeding your new baby?

Check all that apply

- My baby was sick and was not able to breastfeed
- I was sick or on medicine
- I had other children to take care of
- I had too many household duties
- I didn't like breastfeeding
- I tried but it was too hard
- I didn't want to
- I was embarrassed to breastfeed
- I went back to work or school
- I wanted my body back to myself
- Other → Please tell us:

If you did not breastfeed your new baby, go to Question 62b.

59. Are you currently breastfeeding or feeding pumped milk to your new baby?

- No
- Yes → **Go to Question 62a**

Go to Question 60

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

____ Weeks **OR** ____ Months

Less than 1 week

61. What were your reasons for stopping breastfeeding?

Check all that apply

- My baby had difficulty latching or nursing
- Breast milk alone did not satisfy my baby
- I thought my baby was not gaining enough weight
- My nipples were sore, cracked, or bleeding
- It was too hard, painful, or too time consuming
- I thought I was not producing enough milk
- I had too many other household duties
- I felt it was the right time to stop breastfeeding
- I got sick and was not able to breastfeed
- I went back to work or school
- My baby was jaundiced (yellowing of the skin or whites of the eyes)
- Other _____ → Please tell us:

62a. How old was your new baby the first time he or she drank liquids other than breast milk (such as formula, water, juice, tea, or cow's milk)?

____ Weeks **OR** ____ Months

- My baby was less than 1 week old
- My baby has not had any liquids other than breast milk

62b. How old was your new baby the first time he or she ate food (such as baby cereal, baby food, or any other food)?

____ Weeks **OR** ____ Months

- My baby was less than 1 week old
- My baby has not eaten any foods

If your baby is still in the hospital, go to Page 12, Question 67.

63. In which *one* position do you *most often* lay your baby down to sleep now?

Check one answer

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

64. How often does your new baby sleep in the same bed with you or anyone else?

- Always
- Often
- Sometimes
- Rarely
- Never

65. Was your new baby seen by a doctor, nurse, or other health care worker for a *one week check-up* after he or she was born?

- No
- Yes

66. Has your new baby had a well-baby checkup? (A well-baby checkup is a regular health visit for your baby usually at 1, 2, 4, and 6 months of age.)

- No
- Yes

67. Do you have health insurance, Medicaid, TennCare, CoverKids, or CoverTN for your new baby?

No —————→ **Go to Question 69**

Yes

68. What health insurance plan is your new baby covered by?

Check all that apply

- Health insurance from your job or the job of your husband, partner, or parents
- Health insurance that you or someone else paid for (not from a job)
- Medicaid
- TRICARE or other military health care
- TennCare
- CoverKids
- CoverTN
- Other source(s) —————→ Please tell us:

- I do not have health insurance for my new baby

69. Are you or your husband or partner doing anything *now* to keep from getting pregnant? (Some things people do to keep from getting pregnant include not having sex at certain times [natural family planning or rhythm] or withdrawal, and using birth control methods such as the pill, condoms, vaginal ring, IUD, having their tubes tied, or their partner having a vasectomy.)

- No
- Yes —————→ **Go to Question 71**

Go to Question 70

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

Check all that apply

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

If you or your husband or partner is not doing anything to keep from getting pregnant *now*, go to Question 72.

71. What kind of birth control are you or your husband or partner using *now* to keep from getting pregnant?

Check all that apply

- Tubes tied or closed (female sterilization)
- Vasectomy (male sterilization)
- Pill
- Condoms
- Injection once every 3 months (Depo-Provera[®])
- Contraceptive implant (Implanon[®])
- Contraceptive patch (OrthoEvra[®])
- Diaphragm, cervical cap, or sponge
- Vaginal ring (NuvaRing[®])
- IUD (including Mirena[®])
- Rhythm method or natural family planning
- Withdrawal (pulling out)
- Not having sex (abstinence)
- Emergency contraception (The "morning-after" pill)
- Other —————→ Please tell us:

72. Since your new baby was born, have you had a postpartum checkup for yourself?
 (A postpartum checkup is the regular checkup a woman has about 6 weeks after she gives birth.)

- No
- Yes

73. Below is a list of feelings and experiences that women sometimes have after childbirth. Read each item to determine how well it describes your feelings and experiences. Then, write on the line the number of the choice that best describes how often you have felt or experienced things this way since your new baby was born. Use the scale when answering:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

- a. I felt down, depressed, or sad.
- b. I felt hopeless
- c. I felt slowed down

OTHER EXPERIENCES

The next questions are on a variety of topics.

74. During the 3 months before you got pregnant with your new baby, how often did you participate in any physical activities or exercise for 30 minutes or more? (For example, walking for exercise, swimming, cycling, dancing, or gardening.)

- Less than 1 day per week
- 1 to 2 days per week
- 3 to 4 days per week
- 5 or more days per week
- I was told by a doctor, nurse, or other health care worker not to exercise

75. Which of the following statements best describes you during the 3 months before you got pregnant with your new baby?

Check one answer

- I was trying to get pregnant
- I was trying to keep from getting pregnant but was not trying very hard
- I was trying hard to keep from getting pregnant

76. Did you use any of these drugs when you were pregnant? For each item, circle Y (Yes) if you used it or circle N (No) if you did not.

- | | No | Yes |
|---|----|-----|
| a. Prescription drugs N | N | Y |
| If yes, what kinds? —————> Please tell us: | | |
| | | |
| b. Marijuana (pot, bud) or Hashish (Hash) N | N | Y |
| c. Amphetamines (uppers, ice, speed, crystal meth, crank). N | N | Y |
| d. Cocaine (rock, coke, crack) or heroin (smack, horse). N | N | Y |
| e. Tranquilizers (downers, ludes) or hallucinogens (LSD/acid, PCP/angel dust, ecstasy). N | N | Y |
| f. Sniffing gasoline, glue, hairspray, or other aerosols N | N | Y |

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

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

If your baby is not alive or is not living with you, go to Question 81.

78. Listed below are some statements about safety. For each thing, circle **Y** (Yes) if it applies to you or circle **N** (No) if it does not.

	No	Yes
a. My baby was brought home from the hospital in an infant car seat	N	Y
b. My baby always or almost always rides in an infant car seat	N	Y
c. My home has a working smoke alarm	N	Y
d. There are loaded guns, rifles, or other firearms in my home	N	Y

79. When your new baby rides in a car, truck, or van, how often does he or she ride in an infant car seat?

- Always
- Often
- Sometimes
- Rarely
- Never

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

Hours

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

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

- No, I don't work or go to school
- No, I'm on maternity leave, but plan to return to work
- Yes

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

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

- Less than \$8,000
- \$8,000 to \$9,999
- \$10,000 to \$14,999
- \$15,000 to \$19,999
- \$20,000 to \$24,999
- \$25,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 or more

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

People

84. What is today's date?

/ / 20
 Month Day Year

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

Thanks for answering our questions!

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