PRAMS

Pregnancy Risk Assessment Monitoring System

1996 Surveillance Report

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Division of Reproductive Health

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

PRAMS 1996 SURVEILLANCE REPORT

PREGNANCY RISK ASSESSMENT MONITORING SYSTEM

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
National Center for Chronic Disease Prevention and Health Promotion
Division of Reproductive Health

Suggested Citation

Centers for Disease Control and Prevention. *PRAMS 1996 Surveillance Report*. Atlanta, GA: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 1999.

Preface

Since 1987, the Pregnancy Risk Assessment Monitoring System (PRAMS) has served as a data source for states addressing public health issues among their maternal and child health (MCH) populations. The dissemination of PRAMS data is an essential step in translating findings from PRAMS into public health action. We are pleased to present the second PRAMS Surveillance Report, a compilation of PRAMS results for a variety of MCH indicators.

Our first report highlighted 1995 PRAMS data, and this report highlights data for births occurring in 1996. In addition, we have provided data covering four years — 1993 to 1996. This report provides benchmarks by state for 25 MCH indicators; moreover, it permits examination of 17 indicators across participating states and over time. An addition to this report is a summary of the public health significance of each indicator.

PRAMS is a population-based survey of women who have recently given birth to a live infant. This survey collects information on women's experiences and behaviors before, during, and shortly after pregnancy. Thus, states participating in PRAMS gain unique and invaluable information for public health administrators, policymakers, and researchers as they develop programs and policies to improve the health of women and children.

We hope that this report will be useful to public health practitioners across the United States. We plan to produce this report annually and welcome your comments about the merit, design, and content of this publication.

Lynne S. Wilcox, MD, MPH
Director, Division of Reproductive Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention

Acknowledgments

This report is the product of the collaborative efforts of many people at the Centers for Disease Control and Prevention (CDC). Review and commentary from PRAMS team members at CDC and from PRAMS Working Group members in participating states have enhanced its quality.

Editors	Mary E. Gaffield, MPH Christopher Johnson, MS Brian Morrow, MS (of Klemm Analysis Group)
Authors	Indu Ahluwalia, MPH, PhD Brenda Colley-Gilbert, PhD, MSPH Laurie Fischer, MPH (of TRW, Inc.) Mary Rogers, DrPH, MSN Nedra Whitehead, MS
Technical editor	Suzanne Johnson-DeLeon, MPH

In addition to these editors and authors, the PRAMS Team at CDC includes Holly Shulman and Mike Vanchiere.

The PRAMS Working Group comprises the following state collaborators: Albert Woolbright, Alabama; Kathy Perham-Hester, Alaska; Gina Redford, Arkansas; Marilyn Leff, Colorado; Richard Hopkins, Florida; Leslie Lipscomb, Georgia; Bruce Steiner, Illinois; Danielle Broussard, Louisiana; Martha Henson, Maine; Yasmina Bouraoui, Michigan; Susan Nalder, New Mexico; Michael Medvesky, New York; Paul Buescher, North Carolina; Jo Bouchard, Ohio; Richard Lorenz, Oklahoma; Alexandra Connelly, South Carolina; Nan Streeter, Utah; Sherilynn Casey, Washington; and Melissa Baker, West Virginia.

Publication support was provided by Palladian Partners, Inc. under Contract No. 200-98-0415 for the National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

Contents

South Carolina

Washington

West Virginia

Appendixes

Introduction

The Pregnancy Risk Assessment Monitoring System (PRAMS) is part of the Centers for Disease Control and Prevention (CDC) initiative to reduce infant mortality and low birthweight. PRAMS is an ongoing, population-based surveillance system that was designed to identify and monitor selected self-reported maternal behaviors and experiences that occur before, during, and after pregnancy among women who deliver a live-born infant.

This report is a compilation of data on 24 maternal and child health (MCH) indicators from the PRAMS surveillance system. CDC collaborated with the PRAMS states to choose the indicators included in this report. The criterion for including a state in this report was attainment of questionnaire response rates of approximately 70% or higher. Eleven states met this criterion: Alabama, Alaska, Florida, Georgia, Maine, Michigan, New York, Oklahoma, South Carolina, Washington, and West Virginia.

The indicators in the report cover a variety of topics, including unintended pregnancy, prenatal care, Medicaid coverage, participation in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), breast-feeding, smoking, drinking, hospital stay for delivery, infant health, infant sleep position, prenatal human immunodeficiency virus (HIV) prevention and test counseling, physical abuse, and birth control use. Many of the indicators are included in the *Healthy People 2000* objectives[1,2] and are reporting requirements for the Title V Maternal and Child Health Block Grant, the major funding source for state MCH programs.

Highlighted in this report are PRAMS data from births that occurred during 1996. Prevalence estimates for each of the 24 indicators are presented by state for 1996 and prevalence estimates for 1993–1996 are listed for 17 indicators. The report includes results from both multistate and state-specific analyses. For each state, sociodemographic data are presented for the PRAMS-eligible population (women delivering a live infant in their state of residence). Subgroup analyses for each state are presented by age, race, education, and Medicaid status using 1996 data for six indicators: unintended pregnancy, breast-feeding, smoking during pregnancy, drinking during pregnancy, physical violence, and entry into prenatal care. In addition, analyses for the six indicators are provided by Hispanic ethnicity for three states, in which more than 10% of 1996 births were to Hispanic mothers.

This is the second report to capture data from PRAMS states in a comprehensive manner. Several differences between the 1996 and 1995 report are evident. Five indicators presented in the 1995 report were removed and seven new indicators were added to the 1996 report to reflect emerging maternal and child health priorities and concerns. To

emphasize the importance and relevance of each multistate indicator, a brief summary precedes tabular and graphic results. In addition, the PRAMS questionnaire was modified in 1996. As a result, trends for indicators reflect three years of data collected using the old questionnaire and, for most states, one year of data from the new questionnaire. Information on trends is not presented for indicators without data prior to 1996 or that were collected differently by the two questionnaires.

Policymakers can use these data to monitor progress toward national, state, and local pregnancy-related health objectives, including the reduction and prevention of high-risk pregnancies and adverse pregnancy outcomes. We view dissemination of the data included in this report as a key step in the translation of PRAMS data into public health action, a primary goal for PRAMS. We hope that this report will serve as a valuable reference document for use in public health planning and policy development.

References

1. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives: full report, with commentary. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, 1991. DHHS publication no. (PHS)91-50212.

2. Public Health Service. Healthy children 2000: national health promotion and disease prevention objectives selected for mothers, infants, children, adolescents, and youth. Adapted from and included in: Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives: full report, with commentary. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, 1991. DHHS publication no. (PHS)91-50212.

Overview of PRAMS

Background

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a population-based surveillance system of maternal behaviors and experiences before and during a woman's pregnancy and during the early infancy of her child. PRAMS was developed in 1987 in response to several distressing statistics. The U.S. infant mortality rate was no longer declining as rapidly as it had in past years. The prevalence of low birthweight infants showed little change. At the same time, maternal behaviors such as smoking, drug use, and limited use of prenatal and pediatric care services were recognized as contributors to these slow rates of decline.

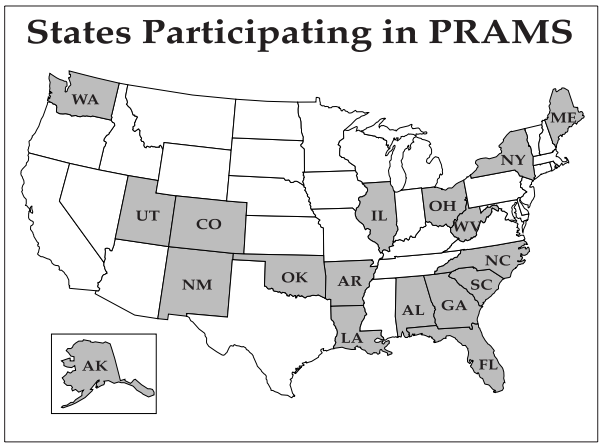
Purpose

PRAMS supplements data from vital records for planning and assessing perinatal health programs on a state level. Because PRAMS data are population-based, findings from data analyses can be generalized to an entire state's population of women having live births. PRAMS is designed not only to generate state-specific data but also to allow comparisons among states through the use of standardized data collection methods. Findings from analysis of PRAMS data have been used to enhance states' understanding of maternal behaviors and experiences and their relationship with adverse pregnancy outcomes. Thus, these data can be used to develop and assess programs and policies designed to reduce adverse pregnancy outcomes.

History

PRAMS is administered by the Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. PRAMS operates through a cooperative agreement between CDC and states that have been awarded grants on a competitive basis (Figure 1). In 1987, the first year of PRAMS, five states and the District of Columbia participated. In 1991, eight states were added; and in 1996–1997, six more states joined the PRAMS team and began collecting data during 1997. California participated in PRAMS during 1991–1996. Current PRAMS participants are Alabama, Alaska, Arkansas, Colorado, Florida, Georgia, Illinois, Louisiana, Maine, New Mexico, New York, North Carolina, Ohio, Oklahoma, South Carolina, Utah, Washington, and West Virginia. Within state health departments, PRAMS program structures cross several existing organizational units, including maternal and child health and vital statistics. PRAMS surveillance currently covers about 35% of all U.S. births.

Figure 1



Methodology

PRAMS generates statewide estimates of important perinatal health indicators among women delivering a live infant. Each participating state uses a standardized data collection method developed by CDC.[1] PRAMS staff in each state collect data through statewide mailings and follow-up with nonrespondents by telephone. Every month, a stratified systematic sample of 100–250 new mothers is selected from a frame of eligible birth certificates. Each sampled mother is mailed an explanatory letter that introduces the survey, followed by the 14-page questionnaire at two to six months after delivery. A second questionnaire package, and in most states a third, is mailed to those who do not respond. PRAMS staff telephone those mothers who do not respond to the mailed survey.

Georgia, Michigan, and New York sought to increase survey participation of urban and minority women by supplementing the standard mail/telephone methodology with hospital-based surveillance. In 1996, approximately 5% of Georgia mothers, 19% of Michigan mothers, and 6% of New York mothers were sampled by hospital-based surveillance. Women were sampled from hospital delivery logs and interviewed before they left the hospital. Sampled women were given a self-administered questionnaire within 48 hours of delivery. A second, mailed questionnaire consisting of PRAMS questions concerning early infant development and postpartum experiences was sent to these mothers at two months after delivery.

The PRAMS questionnaire addresses myriad topics, including barriers to prenatal care and content of prenatal care, obstetric history, maternal use of alcohol and cigarettes, nutrition, economic status, maternal stress, and early infant development and health status. The questionnaire consists of a core component and a state-specific component. The core portion is used by each of the participating PRAMS states. Each state develops its own state-specific portion that addresses its particular data needs. Since its inception, the PRAMS questionnaire has undergone several revisions, referred to as "phases." Revisions to the questionnaire have occurred primarily to capture data on recent guidelines or emerging issues concerning Maternal and Child Health, such as knowledge of periconceptual folic acid, and to improve respondents' comprehension of questions. The current phase, Phase 3, is based on revisions made to the questionnaire in 1995 and put in the field in late 1995 and early 1996. The indicators included in this document are primarily from the core component of the Phase 3 questionnaire.

Additional information on PRAMS can be found in the appendixes. Appendix A describes the PRAMS data collection methodology and questionnaire revision. Appendix B contains a table of 1996 sample sizes, response rates, and stratification variables for each state. Appendix C identifies the corresponding PRAMS question number from the PRAMS Phase 3 Core Questionnaire for each indicator in this report, defines each indicator, and specifies which indicators have associated Year 2000 Objectives or Title V Maternal Child Health Services Block Grant Performance Measures. Appendix D provides a PRAMS Phase 3 Core Questionnaire.

Technical Notes

This report contains data from Alabama, Alaska, Florida, Georgia, Maine, Michigan, New York, Oklahoma, South Carolina, Washington, and West Virginia. These states

had fully implemented PRAMS data collection procedures and achieved response rates of approximately 70% or higher. The tables that present estimates by state with associated confidence intervals use 1996 data. These multistate tables also present state ranges for 1996 data; graphs accompany the tables.

The multistate tables that present trends by state include data for 1993–1996. Data for 1993 were available for all states except Washington, where data were available for only part of the year and sample sizes were too small to produce statewide estimates. Data for 1994, 1995, and 1996 were available for all states included in this report.

The Phase 3 questionnaire was implemented in late 1995 in Maine, South Carolina, and West Virginia and in all other PRAMS states at the beginning of 1996 or shortly thereafter. Several indicators in this report are based on topics that were introduced with Phase 3, including those regarding infant sleep position, HIV counseling and testing, the couple's use of birth control at the time of pregnancy, and husband's or partner's attitudes toward the pregnancy. For these indicators, we lack 1993–1995 data to present trends. The wording of the Phase 3 questions on physical abuse changed substantially from the Phase 2 version; for this reason, we present only 1996 prevalence data without trend data.

For most of the indicators in this report, the wording of the questions changed little, if any, between the Phase 2 and Phase 3 versions. For a few questions, however, the change was substantial enough that we did not use the Phase 2 data in the trends tables. (See Appendix A for details.)

The definitions of some indicators have changed slightly from their definitions in the 1995 surveillance report. For 1996, we chose to refer to initiation of breast-feeding rather than never breast-feeding. We continue to report on breast-feeding at one month, but have dropped the indicator for breast-feeding of less than one week's duration. We also changed the name of the indicator "women not sure of their pregnancy status during the first trimester" to "pregnancy status confirmed after the first trimester" to better define the indicator.

Percentages for the demographic and outcome variables — maternal age, education, race, marital status, birthweight, and ethnicity — used in the state-specific tables were obtained from state birth certificate data provided to CDC. (An exception is Oklahoma, for which all demographic variables were estimated from the PRAMS sampling frame.) Out-of-state residents and, for most states except Alaska, out-of-state births were excluded in describing the PRAMS-eligible population.

Except for the tables of state-specific demographic variables, all tables in the report were produced using weighted PRAMS data. Percentages and standard errors were calculated for the characteristic of interest using PROC CROSSTAB in SUDAAN.[2] The 95% confidence intervals (CI) were computed using the formula CI = percentage ± 1.96 x standard error. The number of respondents, reported in each table, is the number of mothers who answered the corresponding PRAMS question. All missing (blank and "don't know") observations are excluded. The percentage of missing values is noted when it equals or exceeds 10%. Because estimates based on small samples are imprecise and may be biased, estimates where the underlying number of respondents was

fewer than 30 are not reported and are noted in the state-specific tables. In the tables that present data for 1993–1996, the *P* value indicates a test for linear trend and was calculated using PROC LOGISTIC in SUDAAN.

Note that PRAMS data are representative of women whose pregnancies resulted in a live birth and are not generalizable to all pregnant women. For one reporting area, data are not representative of the entire state. New York data are for upstate New York only and exclude New York City, which has an autonomous vital records agency.

References

1. Centers for Disease Control and Prevention. PRAMS model surveillance protocol, 1996 (unpublished).
2. Shah BV, Barnwell BG, Bieler GS. SUDAAN user's manual: software for analysis of correlated data. Release 6.40. Research Triangle Park, NC: Research Triangle Institute, 1995.
3. Centers for Disease Control and Prevention. PRAMS 1995 surveillance protocol. Atlanta, GA: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. GPO no. 8-00324.

Highlights of PRAMS 1996 Surveillance

Between 1993 and 1996, statistically significant improvements were observed among four indicators in several states, whereas a lack of notable progress was detected among five indicators. The table below draws attention to highlights from 1996 PRAMS data.

Improving over time

Late entry into prenatal care	Seven of eleven states experienced a significant decline in the percentage of women entering prenatal care after the first trimester from 1993 to 1996. Prevalence of late entry into prenatal care ranged from 15.7% to 31.8% in 1996.
Breast-feeding initiation	Five of eleven states reported significant increases in breast-feeding initiation from 1993 to 1996. In 1996, breast-feeding initiation ranged from 45.6% to 85.5%.
Breast-feeding duration	Five of eleven states observed significant increases in breast-feeding duration from 1993 to 1996. The prevalence of breast-feeding duration beyond one month in 1996 ranged from 32.4% to 74.3%.
Length of hospital stay	In 1996, length of hospital stay for one night or less for labor and delivery varied from 8.2% to 50.2%. During 1993–1996, eight of eleven states reported significant declines in brief hospital stays.

Mixed results

Unintended pregnancy (includes unwanted and mistimed pregnancies)	Only Georgia experienced a significant decline; the prevalence remained stable in all other states. Unintended pregnancy ranged from 34.1% to 51.0% in 1996.
Smoking before, during, and after pregnancy	Only Washington experienced a significant decline for any of the smoking indicators. In 1996, smoking before pregnancy ranged from 21.0% to 40.2%; 12.0% to 28.0% during pregnancy; and 17.3% to 32.8% after delivery.
Drinking alcohol during the last three months of pregnancy	Georgia and Oklahoma reported significant declines from 1993 to 1996. Alcohol drinking during the last three months of pregnancy ranged from 2.0% to 9.0% in 1996.
Participation in WIC during pregnancy	Alaska and Oklahoma reported significant increases in WIC participation, whereas participation remained stable in other states from 1993 to 1996. In 1996, WIC participation ranged from 29.6% to 57.4%.
Infant placed in an intensive care nursery	Only South Carolina experienced a significant decline from 1993 to 1996 in the percentage of infants placed in an intensive care unit. The percentage of infants placed in an intensive care nursery ranged from 7.8% to 12.5% in 1996.
Medicaid coverage for prenatal care	With the exception of Florida, where a significant decline in coverage was observed, Medicaid coverage for prenatal care remained stable from 1993 to 1996. Medicaid coverage ranged from 25% to 57% in 1996.

Trend data not available

Infant sleep position	In 1996, more than two-thirds of mothers in all states reported placing their infant on his or her back or side most of the time. Prevalence of back sleep position ranged from 24.5% to 42.9%, and side positioning varied from 36.1% to 46.4%.
Prevention and testing counseling for HIV	In 1996, fewer than 50% of women in 6 states reported receiving any counseling during prenatal care (range: 42.2% to 56.0%); a higher percentage in all states reported their provider discussed HIV testing (range: 59.6% to 84.5%).
Physically hurt by a husband or partner before and during the most recent pregnancy	Twelve months prior to pregnancy, the 1996 state prevalence for reporting of physical abuse ranged from 4.4% to 7.6%. Reports of abuse during pregnancy ranged from 2.9% to 5.7%.

Multistate Exhibits

UNINTENDED PREGNANCY AND BIRTH CONTROL USE

PRAMS 1996 Surveillance Report

Unintended Pregnancy and Birth Control Use

Unintended pregnancies, defined as pregnancies that are either mistimed or unwanted at the time of conception, are a problem in the United States.[1–3] Unintended pregnancies are common among all population subgroups. However, the risk is higher for certain populations, such as teenagers, women 40 years of age and older, and women with low income.[1,4–6] Teenagers and women aged 40 years and older are at increased risk of poor pregnancy outcome, and older mothers are at increased risk for pregnancy complications.[7,8]

Unintended pregnancy resulting in a live birth is associated with delayed entry into prenatal care; this may be due to women with unintended pregnancies being less likely to realize they are pregnant in the first trimester than women with intended pregnancies.[9] Other adverse behaviors associated with unintended pregnancy include poor maternal nutrition, smoking, and use of alcohol and other drugs.[1,3] Unintended pregnancy is associated with birth outcome. The proportion of low birthweight infants has been shown to be higher among black women whose pregnancies were unwanted than among those with wanted pregnancies.[1] The consequences of an unintended pregnancy do not end at birth, as evidenced by the association between unintended births and child abuse and neglect.[1,3]

An unintended pregnancy may be due to the inconsistent or improper use of contraceptives or the lack of use of contraceptives. To prevent unintended pregnancies, information on the characteristics of women at risk of unintended pregnancy can be used to improve access to family planning services, to expand women's knowledge of reproductive health and contraceptives, and to promote consistent use of effective contraceptive methods.[1–3] Additionally, information on the prevalence of unintended pregnancy over time provides states a way to monitor their progress in achieving the national goal to reduce the percentage of unintended pregnancies to 30%, set by Healthy People 2000.[2]

Data Highlights

- In 1996, the prevalence of unintended pregnancy among women who had live births ranged from 34.1% (New York State) to 51.0% (South Carolina). Between 1993 and 1996, only one state, Georgia, showed a significantly decreasing trend in the prevalence of unintended pregnancy.
- In 1996, the prevalence of mistimed pregnancy among women who had live births ranged from 26.1% (New York State) to 38.6% (South Carolina). Between 1993 and 1996, only one state, Georgia, showed a decreasing trend in the prevalence of mistimed pregnancy, but it was not statistically significant.
- In 1996, the prevalence of unwanted pregnancy among women who had live births ranged from 7.9% (Maine) to 14.9% (Alabama).
- In 1996, 9.6% (Maine) to 13.5% (West Virginia) of women reported that their husbands or partners did not want the

pregnancy.

- In 1996, the prevalence of any type of birth control use at time of pregnancy among women who reported that their pregnancy was unintended ranged from 38.9% (Oklahoma) to 48.1% (South Carolina).

References

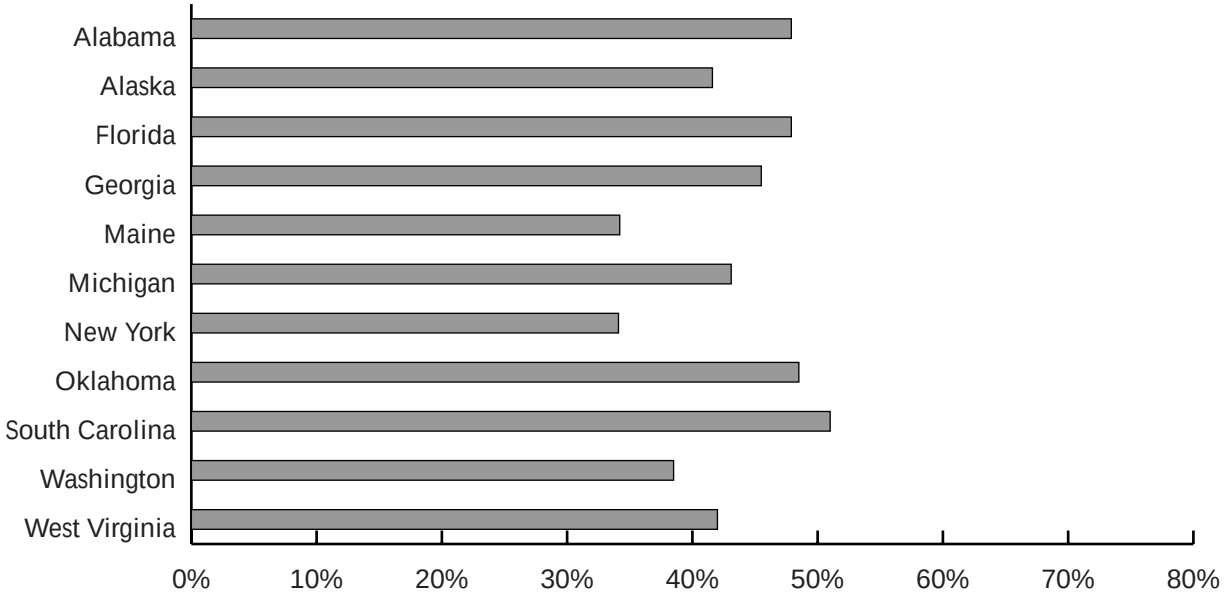
1. Committee on Unintended Pregnancy, Institute of Medicine, National Academy of Sciences. The best intentions: unintended pregnancy and the well-being of children and families. Washington, DC: National Academy Press, 1995.
2. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives: full report, with commentary. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, 1991: DHHS publication no. (PHS)91-50212.
3. Wilcox LS, Marks JS. 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, 1995.
4. Abma J, Chandra A, Mosher WD, Peterson LS, Piccinino LJ. Fertility, family planning, and women's health: new data from the 1995 National Survey of Family Growth. Vital Health Stat 23, 1997 May' (19): 1–114.
5. Forrest JD. Epidemiology of unintended pregnancy and contraceptive use. Am J Obstet Gynecol 1994;170:1485–9.
6. Humphrey AD, Colley-Gilbert BJ, Guild PA. Unintended pregnancy among women having live births in four southeastern states, 1993–1995. Centers for Disease Control and Prevention, Division of Reproductive Health; 1998.
7. Koonin LM, Atrash HK, Lawson HW, Smith JC. Maternal mortality surveillance, United States, 1979–1986. In: CDC Surveillance Summaries, July 1991, Morb Mort Wkly Rep 1991;40(SS-2):1–13.
8. Prysak M, Lorenz RP, Kisley A. Pregnancy outcome in nulliparous women 35 years and older. Obstet Gynecol 1995;85:65–70.
9. Centers for Disease Control and Prevention. Unintended childbearing: Pregnancy Risk Assessment Monitoring System — Oklahoma, 1988–1991. Morb Mort Wkly Rep 1992; 41:933–6.

Prevalence of Unintended Pregnancy Among Women Having a Live Birth, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,753	47.9	1.5	45.1–50.8
Alaska	1,184	41.6	1.6	38.4–44.8
Florida	1,851	47.9	1.6	44.9–51.0
Georgia	1,619	45.5	1.7	42.2–48.7
Maine	1,097	34.2	1.6	31.0–37.4
Michigan	1,506	43.1	1.9	39.3–46.9
New York ‡	1,277	34.1	1.8	30.5–37.7
Oklahoma	1,921	48.5	1.9	44.8–52.3
South Carolina	1,955	51.0	1.6	47.8–54.1
Washington	1,976	38.5	1.7	35.1–41.8
West Virginia	1,410	42.0	1.9	38.4–45.7

*1996 state range is 34.1–51.0%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Unintended Pregnancy Among Women Having a Live Birth, 1996



Prevalence of Unintended Pregnancy Among Women Having a Live Birth, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	49.9	49.3	48.0	47.9	0.31
Alaska	43.5	42.6	40.8§	41.6	0.29
Florida	45.9	46.9	45.0	47.9	0.57
Georgia	52.0	47.5	47.5	45.5	0.02†
Maine	34.0	30.9§	39.3	34.2	0.31
Michigan	44.5	38.1	42.9	43.1	0.96
New York‡	33.4	30.3	34.6	34.1	0.46
Oklahoma	44.9	48.2	48.1	48.5	0.27
South Carolina	49.1	46.9	50.0	51.0	0.26
Washington	not available	38.7	39.0	38.5	0.92
West Virginia	42.0	40.6	45.2	42.0	0.55

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.
§Missing at least 10% of data.

Year 2000 Health Objective 5.2:

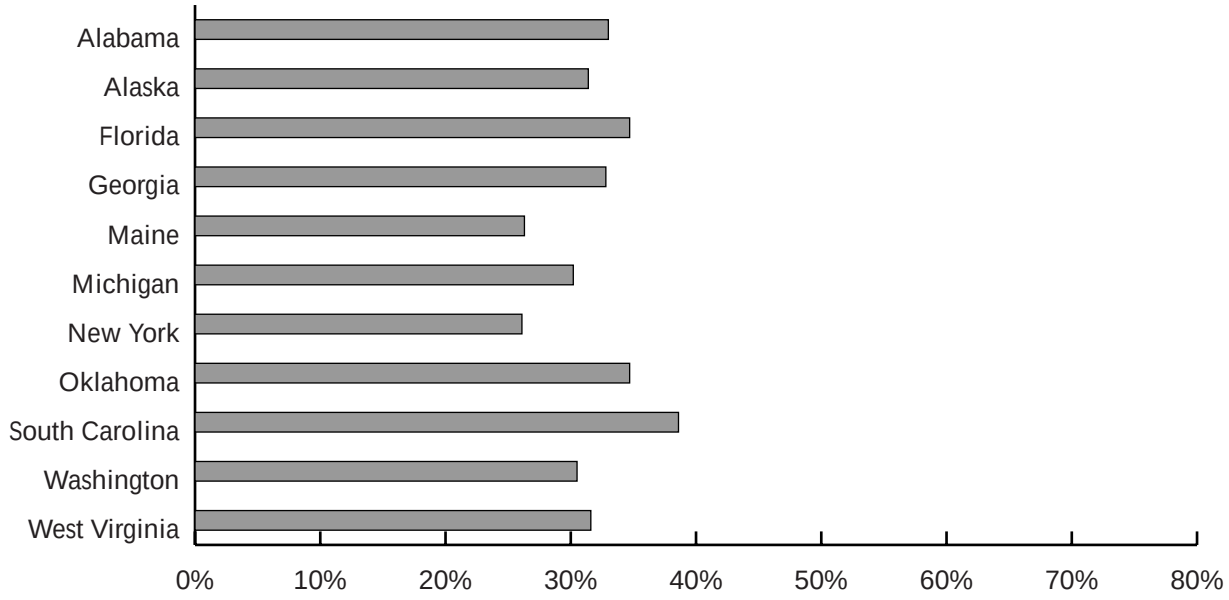
Reduce to no more than 30% the proportion of all pregnancies resulting in a live birth that are unintended.

Prevalence of Mistimed Pregnancy Among Women Having a Live Birth, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,753	33.0	1.4	30.2–35.8
Alaska	1,184	31.4	1.5	28.4–34.4
Florida	1,851	34.7	1.5	31.7–37.6
Georgia	1,619	32.8	1.6	29.8–35.9
Maine	1,097	26.3	1.5	23.3–29.2
Michigan	1,506	30.2	1.8	26.6–33.7
New York‡	1,277	26.1	1.7	22.8–29.4
Oklahoma	1,921	34.7	1.8	31.2–38.3
South Carolina	1,955	38.6	1.6	35.5–41.6
Washington	1,976	30.5	1.6	27.3–33.7
West Virginia	1,410	31.6	1.8	28.1–35.1

*1996 state range is 26.1–38.6%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Mistimed Pregnancy Among Women Having a Live Birth, 1996



Prevalence of Mistimed Pregnancy Among Women Having a Live Birth, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	36.4	36.9	35.8	33.0	0.12
Alaska	30.1	32.6	29.2§	31.4	0.92
Florida	32.2	32.4	32.5	34.7	0.28
Georgia	38.0	33.7	34.5	32.8	0.06
Maine	27.3	24.6§	32.5	26.3	0.54
Michigan	32.2	28.4	31.0	30.2	0.67
New York‡	23.7	21.7	26.3	26.1	0.19
Oklahoma	33.4	37.2	37.8	34.7	0.67
South Carolina	35.7	34.5	35.0	38.6	0.21
Washington	not available	30.7	29.8	30.5	0.94
West Virginia	32.0	31.7	35.7	31.6	0.72

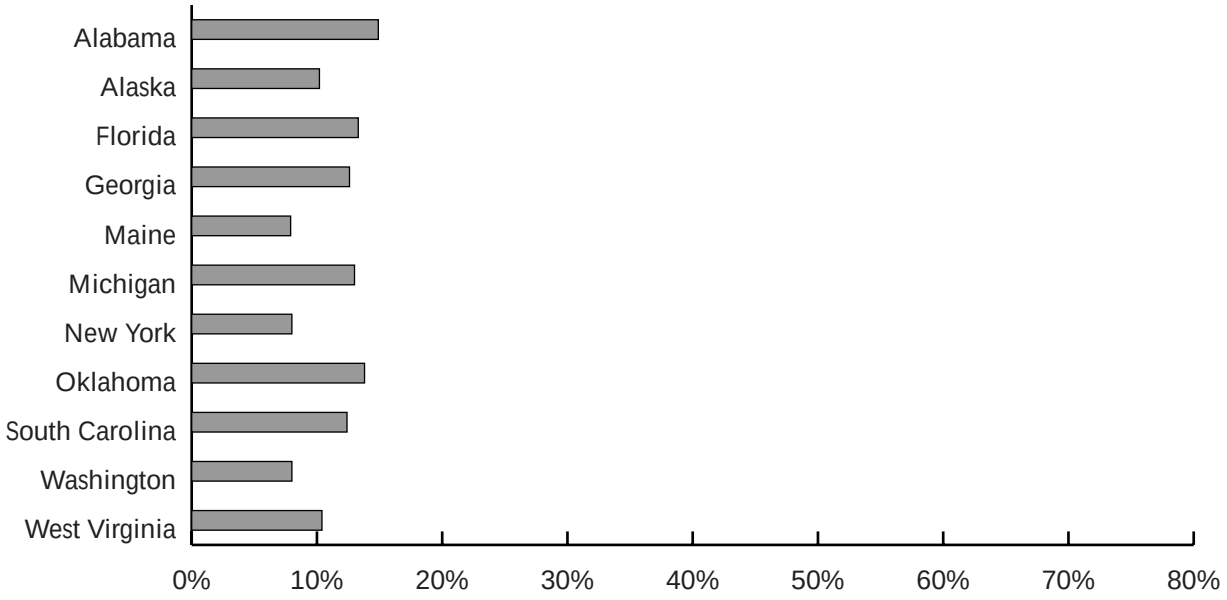
*Based on a test for linear trend using logistic regression.
‡Data do not include New York City.
§Missing at least 10% of data.

Prevalence of Unwanted Pregnancies, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,753	14.9	1.1	12.7–17.1
Alaska	1,184	10.2	1.0	8.3–12.1
Florida	1,851	13.3	1.0	11.3–15.3
Georgia	1,619	12.6	1.1	10.5–14.8
Maine	1,097	7.9	0.9	6.1–9.7
Michigan	1,506	13.0	1.3	10.5–15.4
New York‡	1,277	8.0	1.1	5.9–10.2
Oklahoma	1,921	13.8	1.4	11.1–16.5
South Carolina	1,955	12.4	1.1	10.3–14.5
Washington	1,976	8.0	0.9	6.1–9.8
West Virginia	1,410	10.4	1.1	8.2–12.7

*1996 state range is 7.9–14.9%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Unwanted Pregnancies, 1996



Prevalence of Unwanted Pregnancies, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	13.5	12.4	12.2	14.9	0.42
Alaska	13.5	10.0	11.6§	10.2	0.08
Florida	13.8	14.6	12.5	13.3	0.45
Georgia	14.1	13.8	13.0	12.6	0.30
Maine	6.8	6.3§	6.8	7.9	0.38
Michigan	12.3	9.7	11.9	13.0	0.48
New York‡	9.7	8.5	8.3	8.0	0.41
Oklahoma	11.4	11.0	10.3	13.8	0.31
South Carolina	13.5	12.4	15.0	12.4	0.89
Washington	not available	8.0	9.3	8.0	0.95
West Virginia	9.9	8.9	9.6	10.4	0.66

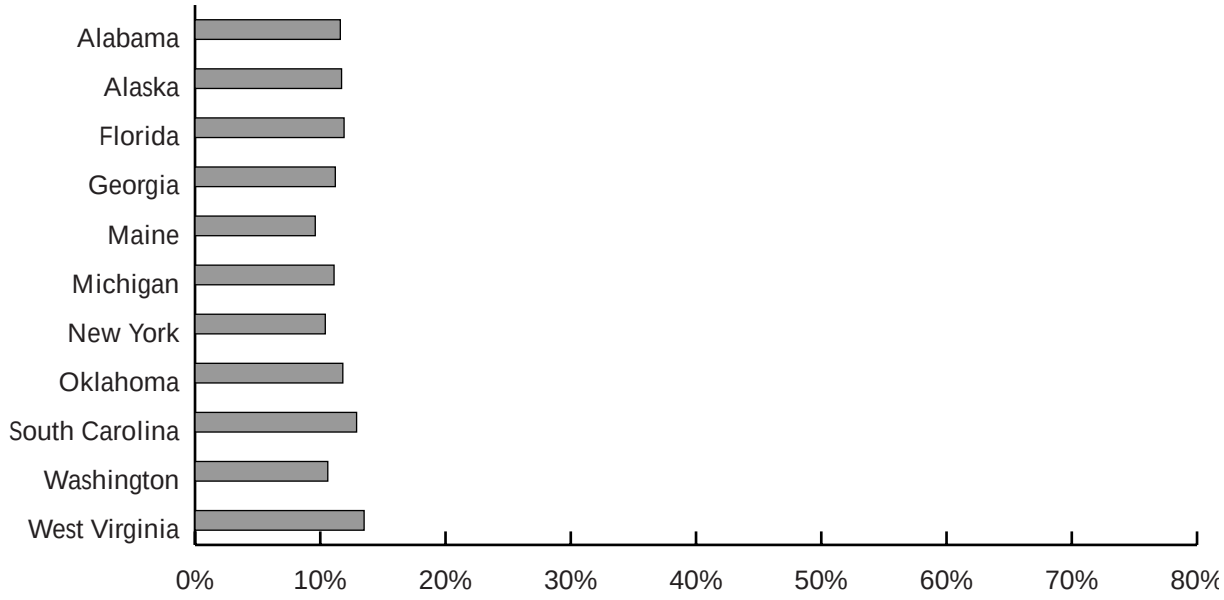
*Based on a test for linear trend using logistic regression.
‡Data do not include New York City.
§Missing at least 10% of data.

Prevalence of Women Whose Husband/Partner Did Not Want Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,885	11.6	1.0	9.7–13.5
Alaska	1,023	11.7	1.1	9.5–13.9
Florida	1,928	11.9	1.0	9.9–13.8
Georgia	1,645	11.2	1.0	9.2–13.3
Maine	1,182	9.6	1.0	7.6–11.5
Michigan	1,604	11.1	1.2	8.8–13.4
New York‡	1,346	10.4	1.2	8.1–12.7
Oklahoma	2,027	11.8	1.2	9.3–14.2
South Carolina	2,062	12.9	1.1	10.8–15.0
Washington	1,581	10.6	1.2	8.2–13.0
West Virginia	1,502	13.5	1.3	11.0–16.1

*1996 state range is 9.6–13.5%. †Confidence interval. ‡Data do not include New York City

Prevalence of Women Whose Husband/Partner Did Not Want Pregnancy, 1996

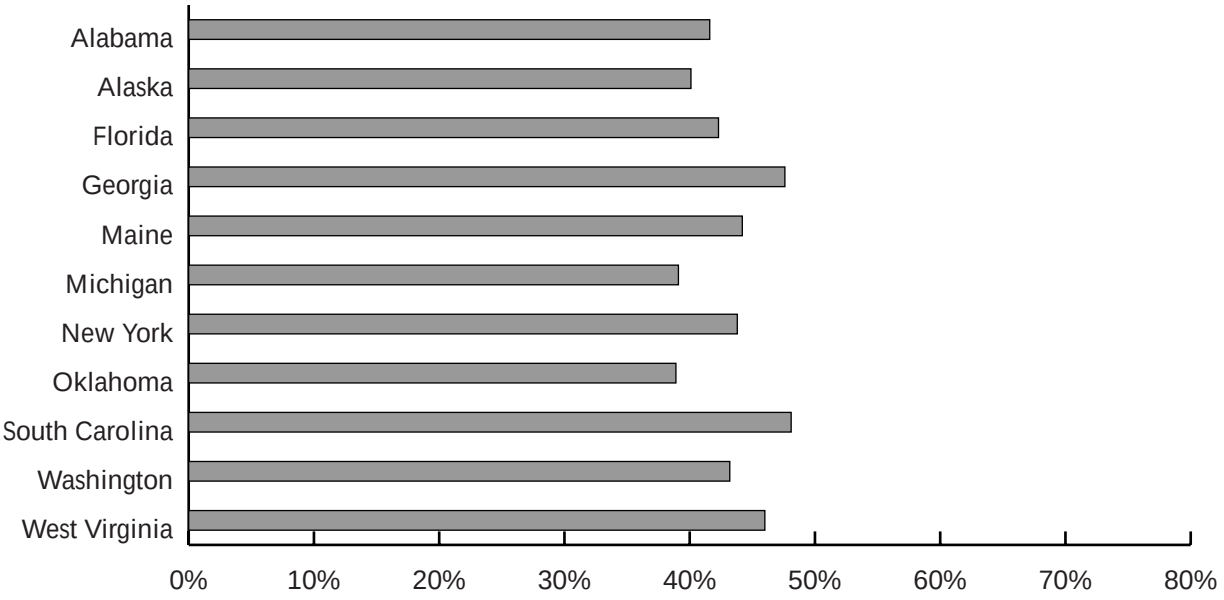


Prevalence of Birth Control Use at Time of Pregnancy Among Women Reporting an Unintended Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	835	41.6	2.2	37.2–46.0
Alaska	375	40.1	2.8	34.6–45.6
Florida	922	42.3	2.2	37.9–46.6
Georgia	760	47.6	2.5	42.6–52.5
Maine	363	44.2	2.9	38.5–50.0
Michigan	771	39.1	2.9	33.4–44.8
New York‡	426	43.8	3.4	37.2–50.4
Oklahoma	883	38.9	2.7	33.5–44.3
South Carolina	997	48.1	2.3	43.7–52.6
Washington	616	43.2	3.3	36.7–49.8
West Virginia	590	46.0	3.0	40.2–51.8

*1996 state range is 38.9–48.1%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Birth Control Use at Time of Pregnancy Among Women Reporting an Unintended Pregnancy, 1996



Multistate Exhibits

PRENATAL CARE

PRAMS 1996 Surveillance Report

Prenatal Care

Prenatal care is recommended for all pregnant women because of its potential to improve the health of mothers and infants. The American College of Obstetricians and Gynecologists and the American Academy of Pediatrics recommend a schedule of 13 to 15 visits that begins during the first trimester of pregnancy.[1]

Early and consistent prenatal care can affect birth outcomes such as birthweight and preterm delivery.[2,3] Medical conditions, including pregnancy-induced hypertension and diabetes, can be diagnosed and managed to improve the health status of both mother and infant.[1,2] During prenatal care, women can receive counseling about the risks of health behaviors such as tobacco and alcohol use, which can contribute to adverse outcomes.[2]

In spite of the demonstrated benefits of early prenatal care, not all women initiate prenatal care in the first trimester, and certain demographic groups are less likely than others to do so. For example, in the United States, black and Hispanic women continue to be less likely to receive early prenatal care than white women.[2] The age of the mother also affects timing of entry into prenatal care; teenage mothers and mothers aged 40 years and older are less likely to initiate care in the first trimester. Low educational attainment and low income both are associated with late entry (i.e., after the first trimester) into prenatal care.[4] Many of the factors that affect the timing of entry into prenatal care are also associated with risk behaviors during pregnancy, adverse medical conditions, and adverse birth outcomes.

Other factors that affect the timing of entry into prenatal care include financial concerns and logistical issues (e.g., lack of transportation, lack of child care, and conflicts between work schedules and office hours). Additionally, late care has been associated with unintended pregnancies, which may be due to an association between unintended pregnancy and lack of awareness of pregnancy status during the first trimester.[4,5]

Information about prenatal care utilization can provide states a method for monitoring their progress toward reaching the Healthy People 2000 goal for 90% of women to begin prenatal care in the first trimester.[6] In addition, the Maternal Child Health Bureau requires Title V Block Grant applicants to provide information on early entry into prenatal care in their grant applications. Efforts to promote early initiation of prenatal care should focus on the women at high risk for late entry and on the reasons some women are unable to obtain early or any prenatal care.

Data Highlights

- Between 1993 and 1996, most states showed significantly decreasing trends in the prevalence of late entry into care, indicating that more women are entering prenatal care during the first trimester. In 1996, the prevalence of late entry into prenatal care ranged from 15.7% (New York State) to 31.8% (Oklahoma).

- From 1993 to 1996, there were no discernible trends for any state in the prevalence of not getting prenatal care as

soon as desired, among women who entered prenatal care late or not at all. In 1996, among women who entered prenatal care late or not at all, the prevalence of not getting prenatal care as soon as desired ranged from 38.1% (New York State) to 57.6% (South Carolina).

- Between 1993 and 1996, two states (Alaska and Georgia) showed significantly decreasing trends in the prevalence of women whose pregnancies were confirmed after the first trimester. In 1996, the prevalence of women whose pregnancies were confirmed after the first trimester ranged from 2.6% (New York State) to 7.2% (Oklahoma).

References

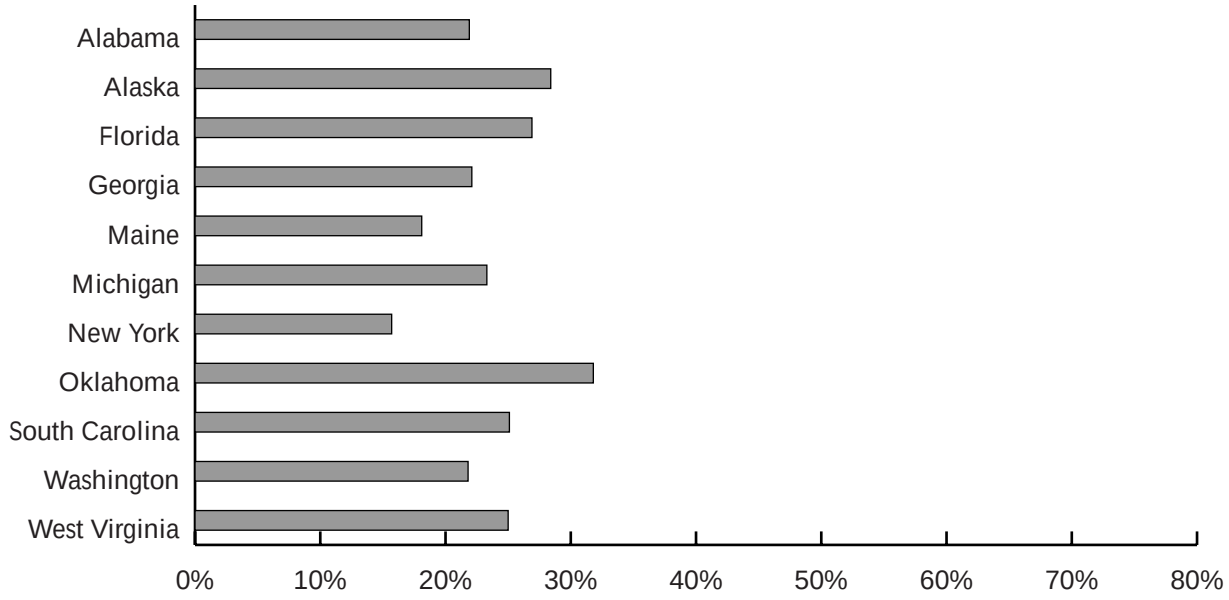
1. American Academy of Pediatrics. Committee on Fetus and Newborn. The American College of Obstetricians and Gynecologists. Committee on Obstetric Practice. Guidelines for perinatal care, 4th ed: Washington, DC: American College of Obstetricians and Gynecologists, 1997.
2. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Report of final natality statistics, 1995. Mon Vital Stat Rep 1997; 45(11), suppl.
3. U.S. Congress. Office of Technology Assessment. Healthy children: investing in the future. OTA-H-345. Washington, DC: U.S. Government Printing Office, 1988.
4. Institute of Medicine. Prenatal care: reaching mothers, reaching infants. Washington, DC: National Academy Press, 1988.
5. Dietz PM, Gazmararian JA, Goodwin MM, Bruce FC, Johnson CH, Rochat RW. Delayed entry into prenatal care: effect of physical violence. Obstet Gynecol 1997; 90(2): 221–4.
6. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives: full report, with commentary. Washington, DC: U. S. Department of Health and Human Services. Public Health Service, 1991: DHHS publication no. (PHS)91–50212.

Prevalence of Entry Into Prenatal Care After the First Trimester, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,858	21.9	1.2	19.6–24.2
Alaska	1,297	28.4	1.4	25.7–31.2
Florida	1,937	26.9	1.4	24.3–29.6
Georgia	1,706	22.1	1.4	19.5–24.8
Maine	1,176	18.1	1.3	15.6–20.6
Michigan	1,589	23.3	1.6	20.2–26.4
New York‡	1,365	15.7	1.4	13.0–18.4
Oklahoma	2,029	31.8	1.8	28.4–35.3
South Carolina	2,042	25.1	1.4	22.4–27.8
Washington	2,089	21.8	1.3	19.1–24.4
West Virginia	1,510	25.0	1.5	22.1–27.9

*1996 state range is 15.7–31.8%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Entry Into Prenatal Care After the First Trimester, 1996



Prevalence of Entry Into Prenatal Care After the First Trimester, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	26.1	26.0	25.7	21.9	0.04†
Alaska	31.0	30.2	30.8	28.4	0.26
Florida	30.4	28.9	26.5	26.9	0.08
Georgia	32.8	26.8	24.0	22.1	0.00†
Maine	27.1	20.6	20.2	18.1	0.00†
Michigan	29.7	27.0	24.9	23.3	0.01†
New York‡	20.0	23.0	17.0	15.7	0.04†
Oklahoma	31.2	30.6	31.7	31.8	0.71
South Carolina	29.6	27.5	26.0	25.1	0.03†
Washington	not available	22.4	24.6	21.8	0.76
West Virginia	31.8	29.8	26.9	25.0	0.00†

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.

Year 2000 Health Objective 14.11

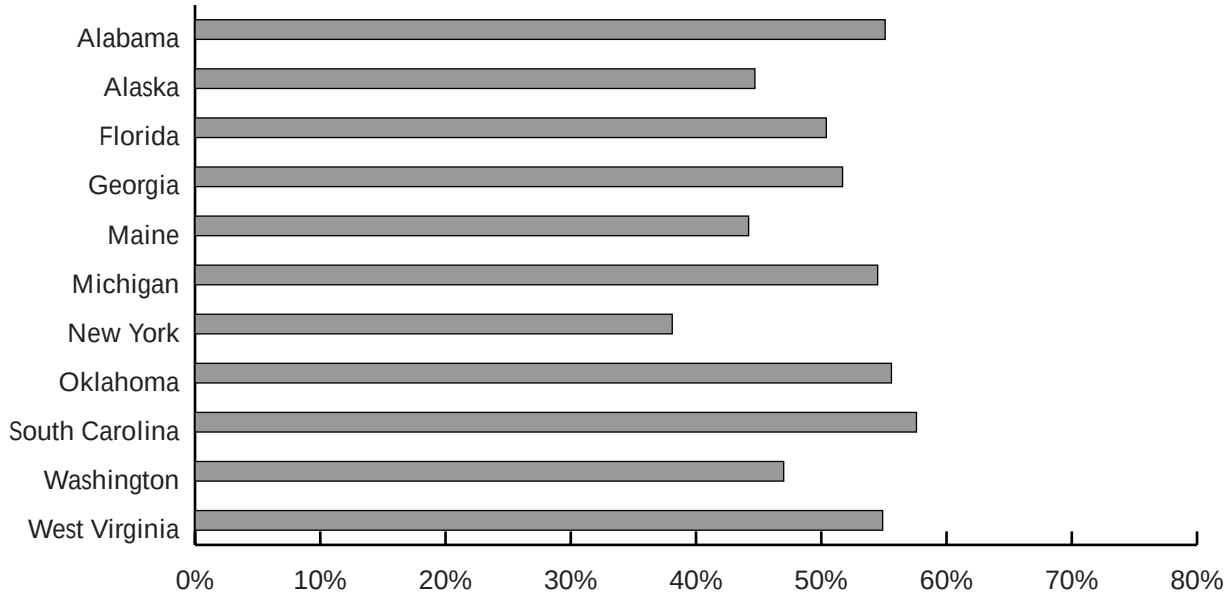
Reduce to no more than 10% the proportion of all mothers entering prenatal care after the first trimester.

Prevalence of Not Getting Prenatal Care as Soon as Desired Among Women Who Started Prenatal Care Late or Had No Prenatal Care, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	397	55.1	3.2	48.8–61.4
Alaska	350	44.7	3.0	38.9–50.5
Florida	539	50.4	3.0	44.5–56.3
Georgia	423	51.7	3.5	44.8–58.6
Maine	203	44.2	4.0	36.4–52.0
Michigan	464	54.5	3.8	46.9–62.0
New York‡	216	38.1	4.8	28.7–47.4
Oklahoma	603	55.6	3.4	48.9–62.3
South Carolina	517	57.6	3.2	51.3–63.8
Washington	599	47.0	3.5	40.2–53.9
West Virginia	410	54.9	3.5	47.9–61.8

*1996 state range is 38.1–57.6%. †Confidence interval. ‡Data do not include New York City

Prevalence of Not Getting Prenatal Care as Soon as Desired Among Women Who Started Prenatal Care Late or Had No Prenatal Care, 1996



Prevalence of Not Getting Prenatal Care as Soon as Desired Among Women Who Started Prenatal Care Late or Had No Prenatal Care, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	51.6	44.8	49.1	55.1	0.36
Alaska	45.1	48.0	46.3	44.7	0.84
Florida	49.3	50.4	53.7	50.4	0.65
Georgia	50.5	50.4	45.7	51.7	0.88
Maine	32.5	34.5	28.3	44.2	0.18
Michigan	51.0	41.9	45.5	54.5	0.56
New York‡	28.9	43.5	45.0	38.1	0.23
Oklahoma	56.1	48.0	51.6	55.6	0.83
South Carolina	53.3	49.8	54.1	57.6	0.27
Washington	not available	43.8	46.9	47.0	0.55
West Virginia	50.2	45.4	43.8	54.9	0.52

*Based on a test for linear trend using logistic regression.

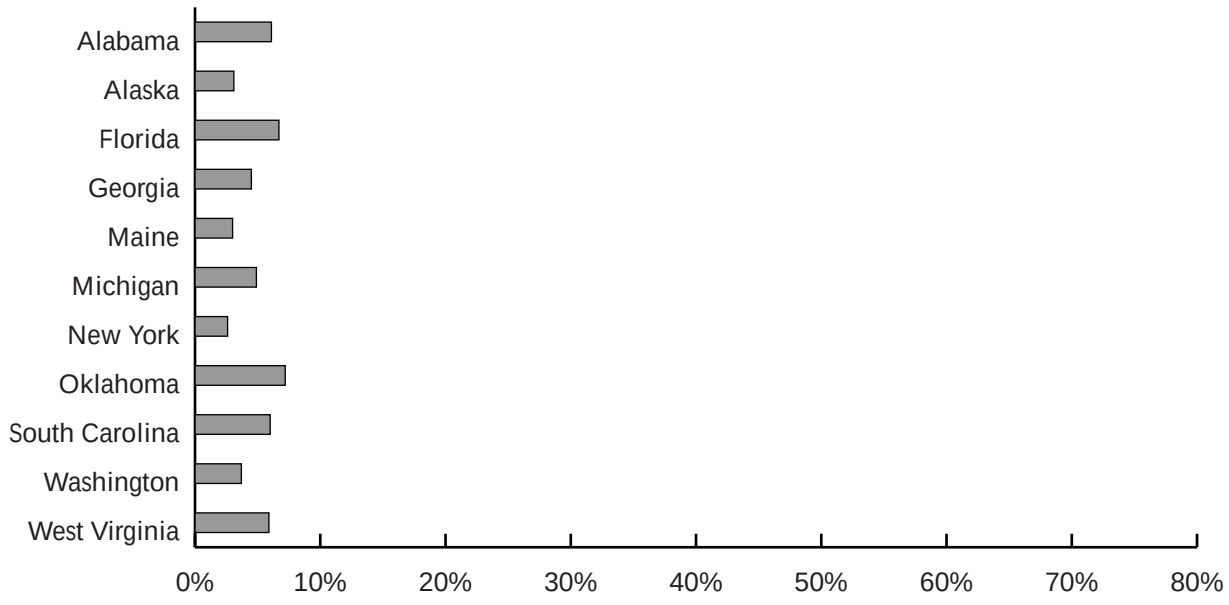
‡Data do not include New York City.

Prevalence of Women Whose Pregnancy Status Was Confirmed After the First Trimester, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,803	6.1	0.7	4.7–7.5
Alaska	1,231	3.1	0.5	2.1–4.1
Florida	1,912	6.7	0.7	5.3–8.1
Georgia	1,667	4.5	0.6	3.4–5.7
Maine	1,150	3.0	0.6	1.9–4.1
Michigan	1,540	4.9	0.7	3.5–6.3
New York‡	1,328	2.6	0.6	1.4–3.7
Oklahoma	1,966	7.2	1.0	5.2–9.3
South Carolina	1,990	6.0	0.8	4.5–7.5
Washington	2,029	3.7	0.5	2.6–4.7
West Virginia	1,459	5.9	0.9	4.2–7.6

*1996 state range is 2.6–7.2%. †Confidence interval. ‡Data do not include New York City

Prevalence of Women Whose Pregnancy Status Was Confirmed After the First Trimester, 1996



Prevalence of Women Whose Pregnancy Status Was Confirmed After the First Trimester, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	6.7	7.4	6.1	6.1	0.37
Alaska	5.2	4.0	4.6	3.1	0.03†
Florida	5.6	6.0	6.3	6.7	0.30
Georgia	6.9	6.4	6.5	4.5	0.04†
Maine	5.2	5.3	4.8	3.0	0.08
Michigan	6.2	6.6	5.3	4.9	0.19
New York‡	2.7	4.3	4.0	2.6	0.72
Oklahoma	5.5	5.4	6.8	7.2	0.15
South Carolina	6.5	5.7	6.4	6.0	0.85
Washington	not available	4.2	4.5	3.7	0.52
West Virginia	7.5	5.2	4.3	5.9	0.13

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.

Multistate Exhibits

MEDICAID COVERAGE AND WIC PARTICIPATION

PRAMS 1996 Surveillance Report

Medicaid Coverage

Medicaid finances medical care for the poor in the United States and thus serves as a health insurance program. During the 1980s, the U.S. Congress authorized a series of major expansions of the Medicaid program to provide health insurance coverage during pregnancy to women who were formerly ineligible to increase women's access to prenatal care.[1] The program went from serving the very poorest mothers meeting very strict eligibility criteria to a health program for low- and moderate-income pregnant women.[1–3] States had latitude in how and when they wanted to implement changes in their respective Medicaid programs.

Since the expansion of Medicaid to a broader group of low-income pregnant women, there has been an increase in the early initiation of prenatal care, participation in support services, and providers serving low-income pregnant women.[1–5] The number of uninsured deliveries in the United States has declined as a result of the Medicaid expansion. However, the impact of expanded Medicaid on birth outcomes varies.[1,3,5,6–10]

Increasingly, Medicaid-eligible women are enrolled in managed care plans and PRAMS data can be used to monitor these changes over time.

Data Highlights

- For 1996, PRAMS data show that in most states, more than one third of the women had their prenatal care covered by Medicaid. The range for prenatal care coverage under Medicaid was 24.9% in New York to 57.0% in West Virginia.
- From 1993 to 1996, the prevalence of prenatal care covered by Medicaid decreased in Florida and Washington.

References

1. Robert Wood Johnson Foundation. Changes in Health Care Financing and Organization Initiative. The Medicaid expansions for pregnant women and children: a special report. Washington, DC: Alpha Center, 1995.
2. Hughes DC, Runyan SJ. Prenatal care and public policy: lessons for promoting women's health. J Am Med Womens Assoc 1995; 50(5):156–9,163.
3. Carpenter MB. The impact of legislation designed to reduce infant mortality. J Perinat Neonatal Nurs 1995; 9(1):19–30.
4. Dubay L, Kenney G. Did Medicaid expansions for pregnant women crowd out private coverage? Health Aff 1997; 16(1):185–93.
5. Piper JM, Mitchel EF Jr, Ray WA. Evaluation of a program for prenatal care case management. Fam Plann Perspect 1996; 26(2):65–8.
6. Singh S, Gold RB, Frost J. Impact of the Medicaid eligibility expansions on coverage of deliveries. Fam Plann Perspect 1996; 28(1): 31–3.
7. Buescher PA, Roth MS, Williams D, Goforth CM. An evaluation of the

impact of maternity care coordination on Medicaid birth outcomes in North Carolina. Am J Public Health 1991; 81(12):1625–9.

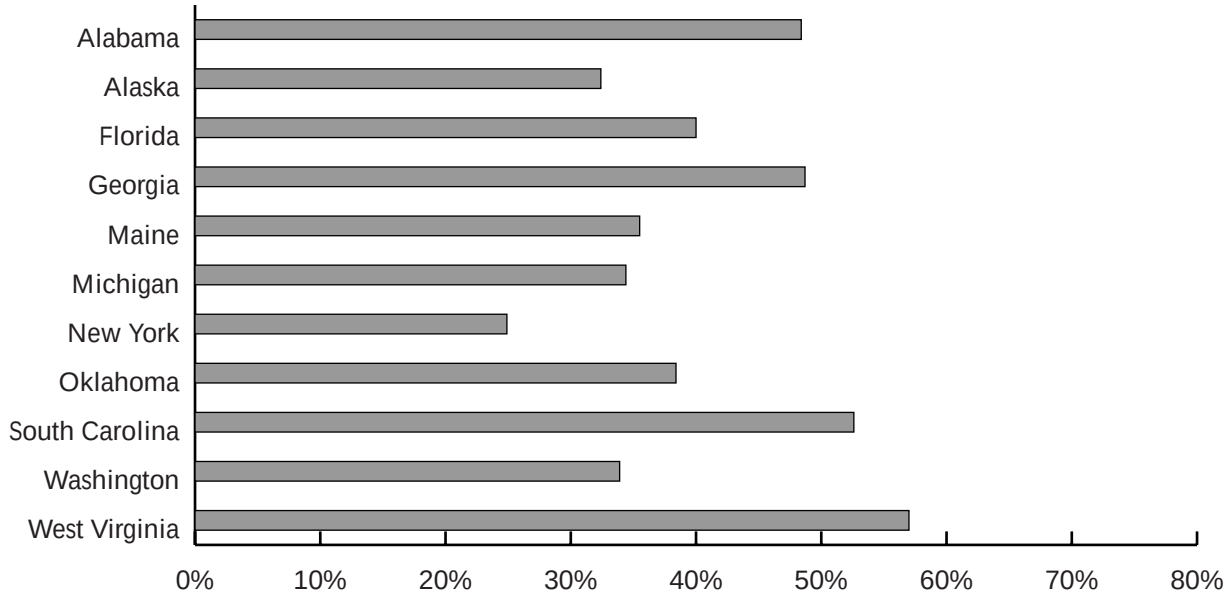
8. Farrow DC, Cawthon ML, Baldwin LM, Connell FA. The impact of extended maternity services on prenatal care use among Medicaid women. Am J Prev Med 1996; 12(2):103–7.
9. Ray WA, Mitchell EF, Piper JM. Effect of Medicaid expansions on preterm birth. Am J Prev Med 1997; 13(1):292–7.
10. Baldwin LM, Larson EH, Connell FA, Nordlund D, Cain KC, Cawthon ML. The effect of expanding Medicaid prenatal services on birth outcomes. Am J Public Health 1998; 88(11):1623–9.

Prevalence of Medicaid Coverage for Prenatal Care, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,868	48.4	0.7	47.0–49.7
Alaska	1,296	32.4	1.4	29.6–35.2
Florida	1,952	40.0	1.5	37.1–43.0
Georgia	1,714	48.7	1.6	45.5–51.9
Maine	1,185	35.5	1.6	32.3–38.6
Michigan	1,572	34.4	1.8	30.9–37.9
New York‡	1,379	24.9	1.7	21.7–28.2
Oklahoma	2,019	38.4	1.9	34.8–42.0
South Carolina	2,047	52.6	1.5	49.6–55.6
Washington	2,094	33.9	1.5	30.9–37.0
West Virginia	1,525	57.0	1.8	53.4–60.6

*1996 state range is 24.9–57.0%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Medicaid Coverage for Prenatal Care, 1996



Prevalence of Medicaid Coverage for Prenatal Care, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	48.7	48.4	49.5	48.4	0.97
Alaska	31.3	33.3	32.6	32.4	0.67
Florida	46.3	44.9	44.5	40.0	0.02†
Georgia	48.0	50.2	52.1	48.7	0.59
Maine	36.9	35.8	36.8	35.5	0.67
Michigan	37.4	33.5	34.1	34.4	0.30
New York‡	28.4	29.4	26.9	24.9	0.17
Oklahoma	37.7	39.3	40.9	38.4	0.71
South Carolina	50.4	49.8	50.1	52.6	0.34
Washington	not available	38.4	37.2	33.9	0.08
West Virginia	53.9	56.1	60.0	57.0	0.12

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡ Data do not include New York City.

WIC Participation

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a national program designed to provide supplemental foods, nutrition education, and health services referrals to low-income pregnant, postpartum, and lactating women, infants (children less than 1 year old), and children up to five years of age. WIC is administered by the Food and Nutrition Services, U.S. Department of Agriculture (USDA), and is managed at the state level by health departments. Eligibility for the WIC program is based on both income and nutritional risk. Guidelines for income level for most states are set at or below 185% of the federal poverty level. Nationwide, the WIC program provides services to 7.4 million women and children annually and of these participants, approximately 11% are pregnant women.[1] The major goal of the WIC program is to improve maternal and infant health.

A review of the literature has shown WIC to be effective in reducing the incidence of low birthweight, very low birthweight, and preterm delivery, especially among women at high risk because of sociodemographic characteristics or medical conditions.[2–3]. WIC is the largest nutrition and health intervention program that serves low-income pregnant women and young children in the United States. Information on WIC participation can be used by specific states to assess the proportion of women participating in WIC services and to examine WIC enrollment over time.

Data highlights

In 1996, the range for WIC participation was 29.6% for New York (excluding New York City) to 57.4% for West Virginia. From 1993 to 1996, there has been a significant increase in the number of pregnant women participating in WIC in Alaska and Oklahoma.

References

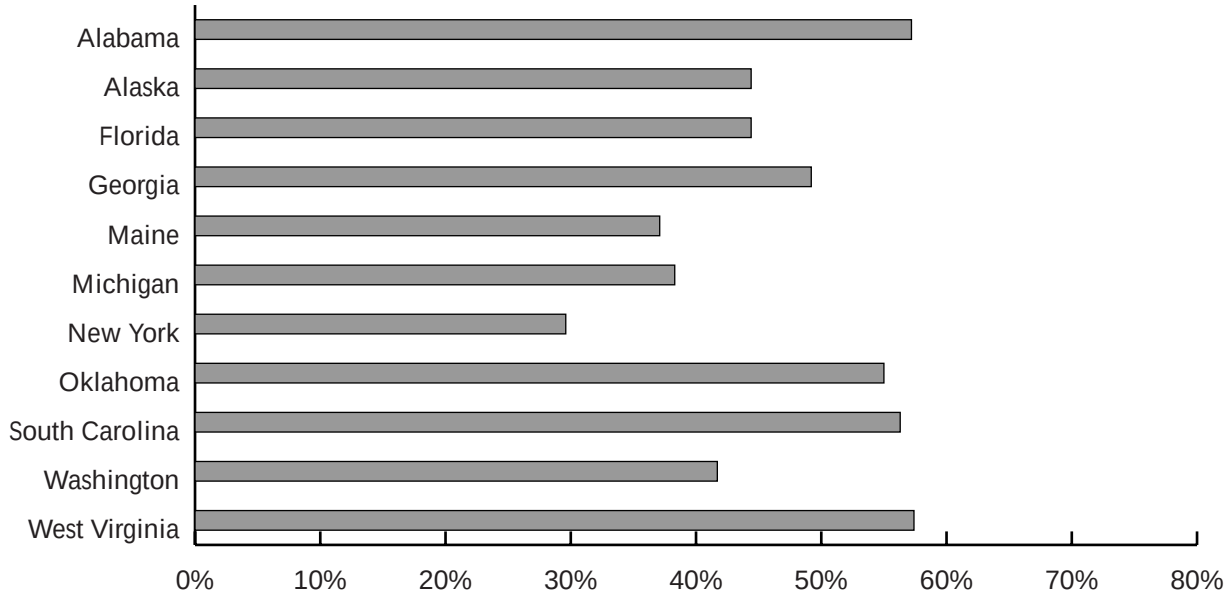
1. United States Department of Agriculture. Food and Nutrition Services. Office of Analysis and Evaluation. National Data Bank, 12/22/97.
2. U.S. General Accounting Office. Early interventions: federal investments like WIC can produce savings. GAO/HRD-92-18, April 1992.
3. Abrams, B. Preventing low birthweight: does WIC work? A review of the evaluations of the Special Supplemental Food Program for Women, Infants, and Children. Ann N Y Acad Sci 1993;678:306-16.

Prevalence of Participation in WIC During Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,883	57.2	1.1	55.0–59.4
Alaska	1,311	44.4	1.5	41.4–47.4
Florida	1,956	44.4	1.5	41.4–47.3
Georgia	1,698	49.2	1.6	46.0–52.4
Maine	1,189	37.1	1.6	34.0–40.2
Michigan	1,609	38.3	1.9	34.7–41.9
New York‡	1,371	29.6	1.7	26.2–33.0
Oklahoma	2,029	55.0	1.9	51.4–58.6
South Carolina	2,076	56.3	1.5	53.3–59.3
Washington	2,093	41.7	1.6	38.5–44.9
West Virginia	1,501	57.4	1.9	53.7–61.0

*1996 state range is 29.6–57.4%. †Confidence interval. ‡Data do not include New York City

Prevalence of Participation in WIC During Pregnancy, 1996



Prevalence of Participation in WIC During Pregnancy, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	56.5	55.8	56.2	57.2	0.66
Alaska	32.6	33.2	42.3	44.4	0.00†
Florida	44.3	43.7	43.4	44.4	0.99
Georgia	48.7	48.7	51.2	49.2	0.56
Maine	36.0	35.1	34.4	37.1	0.76
Michigan	36.4	33.6	34.7	38.3	0.43
New York‡	27.9	31.1	29.4	29.6	0.77
Oklahoma	47.4	46.9	51.3	55.0	0.01†
South Carolina	56.5	56.6	55.6	56.3	0.82
Washington	not available	38.3	41.3	41.7	0.19
West Virginia	56.1	54.4	57.1	57.4	0.43

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.

Multistate Exhibits

BREAST-FEEDING

PRAMS 1996 Surveillance Report

Breast-Feeding

Breast-feeding is promoted by the American Academy of Pediatrics, WIC (Special Supplemental Nutrition Program for Women Infants and Children), and other national and international authorities as the single best way to feed infants.[1-3] Breast-feeding is associated with fewer episodes of illness among infants and promotes healthy relationships between infants and mothers. Trends from the early 1980s to 1995 show a significant increase in breast-feeding initiation and duration among women in the United States. The most noteworthy increases, however, are occurring among black women, women younger than 20 years, WIC participants, and women who are employed full-time; these are populations with traditionally low rates of breast-feeding. These trends are encouraging, in light of the national objectives. The Healthy People 2000 objective for breast-feeding is to increase by at least 75% the proportion of mothers who breast-feed their babies in the early postpartum period and to increase by at least 50% the proportion who continue breast feeding until their babies are 5 to 6 months old. The PRAMS data for 1996 show that a few states have exceeded these goals, but others may require additional breast-feeding promotion efforts. The 1993–1996 trends observed in breast-feeding duration and initiation indicate that breast-feeding promotion programs at the state level may be responsible for these changes. PRAMS data can be used to assess breast-feeding initiation and duration prevalence and trends in these rates over time.

Data Highlights

Initiation

- For 1996, the prevalence of breast-feeding was above 50% in all but two states (Alabama and West Virginia).
- Breast-feeding initiation prevalence rates range from 45.6% in Alabama to 85.5% in Alaska. Breast-feeding initiation trend data from 1993 to 1996 indicate that in 6 of the 11 states in the analysis the rate of breast-feeding initiation increased significantly.

Duration

- The proportion of women who were still breast-feeding one month postpartum was highest in Alaska (74.3%) and lowest in Alabama (32.4%). From 1993 to 1996, the proportion of women breast-feeding at one month postpartum increased significantly in 7 of 10 states.

References

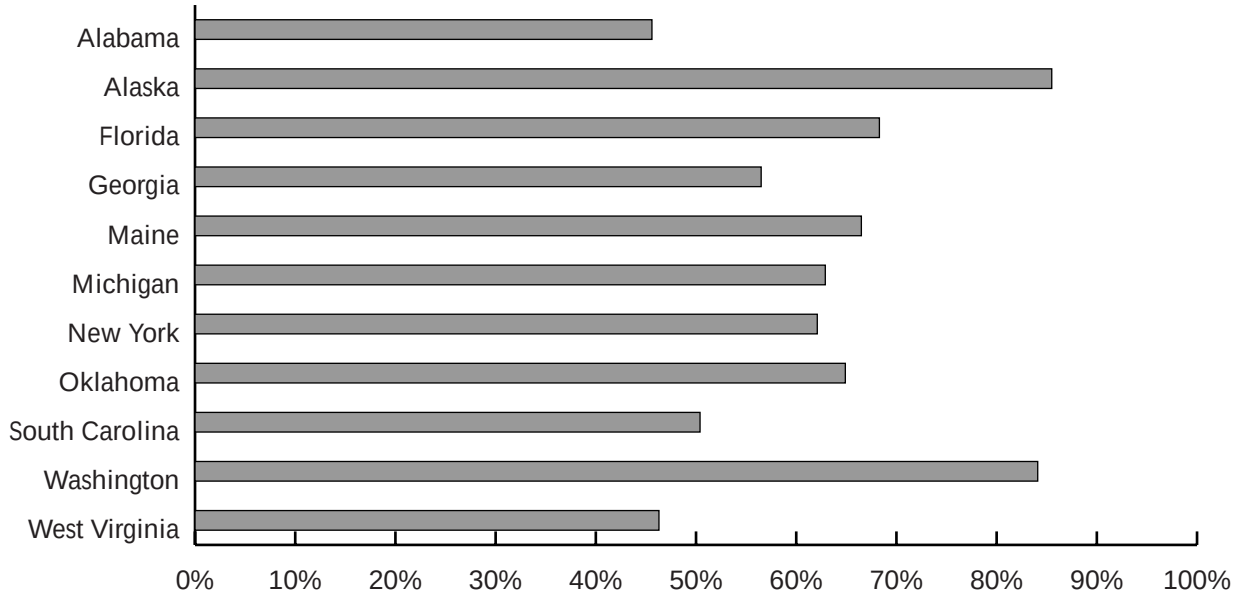
1. Ryan AS. The resurgence of breast-feeding in the United States. Pediatrics 1977; 99: e12.
2. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives: full report, with commentary. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, 1991: DHHS publication no.(PHS)91-50212.
3. American Academy of Pediatrics. Work group on breast-feeding. Pediatrics 1997;100:1035–9.

Prevalence of Ever Breast-Feeding, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,755	45.6	1.5	42.7–48.5
Alaska	1,233	85.5	1.1	83.3–87.7
Florida	1,853	68.3	1.4	65.5–71.0
Georgia	1,633	56.5	1.6	53.2–59.7
Maine	1,133	66.5	1.6	63.4–69.6
Michigan	1,347	62.9	1.9	59.2–66.7
New York‡	1,291	62.1	1.8	58.6–65.7
Oklahoma	1,886	64.9	1.8	61.4–68.5
South Carolina	1,864	50.4	1.6	47.3–53.4
Washington	2,061	84.1	1.3	81.5–86.6
West Virginia	1,451	46.3	1.9	42.6–50.0

*1996 state range is 45.6–85.5%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Ever Breast-Feeding, 1996



Prevalence of Ever Breast-Feeding, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	45.3	43.4	43.7	45.6	0.89
Alaska	83.8	83.7	84.2	85.5	0.27
Florida	58.5	62.5	61.4	68.3	0.00†
Georgia	49.8	51.5	52.2	56.5	0.01†
Maine	62.6	65.7	67.3	66.5	0.11
Michigan	53.7	58.4	56.1	62.9	0.01†
New York‡	57.5	55.6	59.7	62.1	0.09
Oklahoma	60.0	57.7	63.9	64.9	0.03†
South Carolina	40.9	43.2	47.3	50.4	0.00†
Washington	not available	83.1	83.4	84.1	0.62
West Virginia	46.5	46.9	47.2	46.3	0.96

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.

Year 2000 Health Objective 14.9:

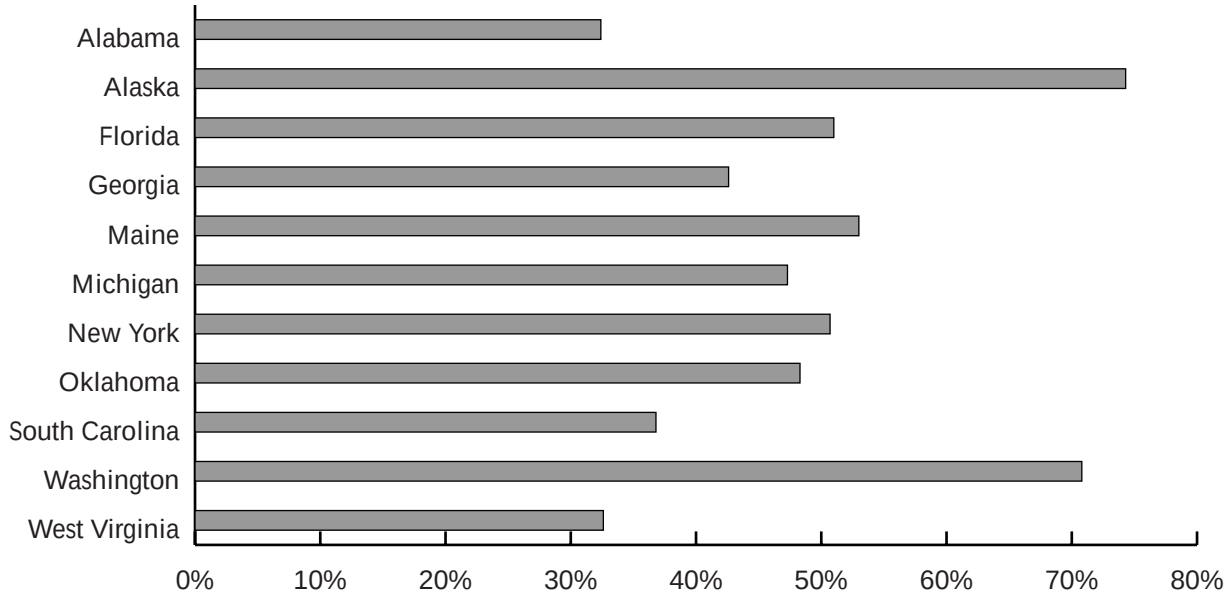
Increase to at least 75% the proportion of mothers who breast-feed their babies in the postpartum period and increase to at least 50% the proportion who continue to breast-feed until their babies are 5 to 6 months old.

Prevalence of Breast-Feeding at One Month After Delivery, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,755	32.4	1.4	29.6–35.1
Alaska	1,233	74.3	1.4	71.6–77.0
Florida	1,853	51.0	1.6	47.9–54.0
Georgia	1,633	42.6	1.7	39.3–45.8
Maine	1,133	53.0	1.7	49.8–56.3
Michigan	1,347	47.3	2.0	43.4–51.3
New York‡	1,291	50.7	1.8	47.1–54.4
Oklahoma	1,886	48.3	1.9	44.6–52.0
South Carolina	1,864	36.8	1.5	33.9–39.8
Washington	2,061	70.8	1.6	67.7–73.9
West Virginia	1,451	32.6	1.8	29.1–36.0

*1996 state range is 32.4–74.3%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Breast-Feeding at One Month After Delivery, 1996



Prevalence of Breast-Feeding at One Month After Delivery, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	31.9	31.4	31.2	32.4	0.86
Alaska	70.4	69.1	72.5	74.3	0.03†
Florida	41.1	46.0	45.9	51.0	0.00†
Georgia	36.3	39.7	39.0	42.6	0.03†
Maine	50.0	52.5	53.3	53.0	0.25
Michigan	40.9	44.2	41.7	47.3	0.09
New York‡	43.2	46.5	48.5	50.7	0.04†
Oklahoma	45.2	44.8	47.7	48.3	0.19
South Carolina	29.0	31.0	35.2	36.8	0.00†
Washington	not available	66.3	69.8	70.8	0.09
West Virginia	33.5	35.0	33.9	32.6	0.62

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.

Multistate Exhibits

SMOKING AND DRINKING

PRAMS 1996 Surveillance Report

Smoking and Drinking

Tobacco and alcohol use affect reproductive health in several ways, depending on the amount and time of use. Cigarette smoking has been associated with lower fecundity and higher rates of spontaneous abortions, abrupto placenta, placenta previa, preterm delivery, and small-for-gestational age births.[1-5] The children of mothers who smoked during pregnancy may continue to be smaller than average and may have slight deficits in neurological development.[1,5] Children exposed to environmental tobacco smoke are at increased risk for several health problems, including lower respiratory system infections, ear infections, and asthma. Infants exposed to tobacco smoke are at increased risk of sudden infant death syndrome.[6]

Alcohol use during pregnancy, particularly in the first trimester, can produce a range of teratogenic effects in the fetus. The most severe effect is fetal alcohol syndrome, which may include facial anomalies, reduced growth head circumference, and mental retardation. Alcohol use has also been associated with growth retardation alone and with more subtle behavioral and developmental effects.[7]

In the general population, women are more likely to use alcohol than tobacco. However, women use alcohol more moderately than tobacco and are more likely to stop using it when they know they are pregnant.[8]

The Healthy People 2000 goal for the proportion of women who smoke is 10%. PRAMS data can be used by states to monitor progress toward their goals for smoking cessation among pregnant women and to target programs to women most at risk for continued smoking during pregnancy.

Data Highlights

- In 1996, 35.6%–55.1% of women in these states used alcohol in the three months before they got pregnant, and 21.0%–40.2% smoked. Only in West Virginia was the proportion of women who smoked higher (40.2%) than that of women who drank alcohol (35.6%).

- By the last three months of pregnancy, few women were still drinking alcohol (2.0%–9.0%), but a substantial proportion were still smoking (12.0%–28.0%).

- After pregnancy, smoking rates rose again but were not quite as high as before pregnancy. The prevalence of smoking at two to six months after pregnancy ranged from 17.3% in Washington to 32.8% in West Virginia.

- From 1993 to 1996, the proportion of women who drank alcohol during the last three months of their pregnancy declined in two states. In Georgia, the prevalence of drinking during the last trimester dropped 30%, from 9.0% in 1993 to 6.3% in 1996. In Oklahoma, the prevalence of drinking during the last trimester dropped 63%, from 7.0% in 1993 to 2.6% in 1996.

- In the same time period, the prevalence of smoking during the last trimester of

pregnancy dropped in one state, Washington. The proportion of Washington women who smoked during the last three months of their pregnancy dropped 35%, from 18.4% in 1994 to 12% in 1996. Washington was also the only state in which the proportion of women who smoked before pregnancy and women who smoked after pregnancy declined, by 18% and 30%, respectively.

References

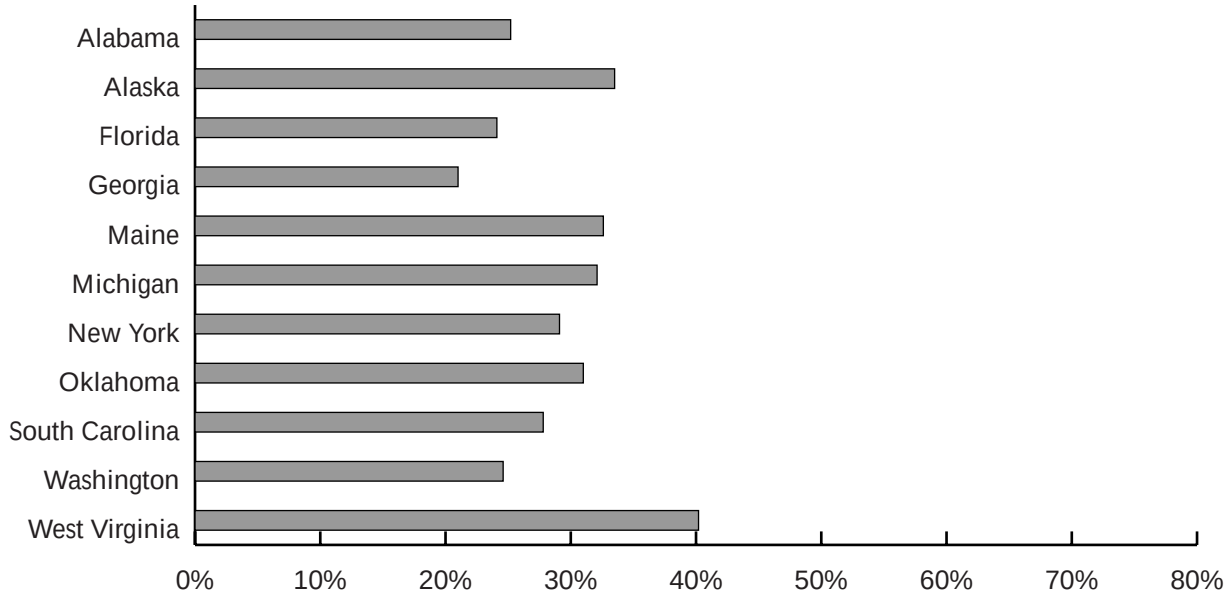
1. Fried PA. A prenatal exposure to tobacco and marijuana: effects during pregnancy, infancy and early childhood. Clin Obstet Gynecol 1993; 36(2):319–37.
2. Andres RL. The association of cigarette smoking with placenta previa and abrupto placentae. Semin Perinatol 1996; 20(2): 154–9.
3. Hughes EG, Brennan BG. Does cigarette smoking impair natural or assisted fecundity? Fertil Steril 1996; 66(5): 679–89.
4. Lambers DS, Clark KE. The maternal and fetal physiologic effects of nicotine. Semin Perinatol 1996;20(2): 115–26.
5. Strauss RS. Effects of the intrauterine environment on childhood growth. Br Med Bull 1997;53(1): 81–95.
6. Golding J. Sudden infant death syndrome and parental smoking — a literature review. Paediatr Perinat Epidemiol 1997;11(1): 67–77.
7. Coles CD. Impact of prenatal alcohol exposure on the newborn and the child. Clin Obstet Gynecol 1993;36(2): 255–66.
8. McGann KP, Spangler JG. Alcohol, tobacco and illicit drug use among women. Prim Care 1997; 24(1):113–22.

Prevalence of Smoking Three Months Before Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,848	25.2	1.3	22.7–27.8
Alaska	1,255	33.5	1.5	30.6–36.4
Florida	1,932	24.1	1.4	21.4–26.8
Georgia	1,663	21.0	1.5	18.1–23.8
Maine	1,156	32.6	1.6	29.5–35.7
Michigan	1,562	32.1	1.9	28.4–35.7
New York‡	1,342	29.1	1.7	25.8–32.4
Oklahoma	1,982	31.0	1.8	27.5–34.4
South Carolina	2,041	27.8	1.4	25.0–30.5
Washington	2,083	24.6	1.6	21.5–27.6
West Virginia	1,434	40.2	1.9	36.5–43.8

*1996 state range is 21.0–40.2%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Smoking Three Months Before Pregnancy, 1996



Prevalence of Smoking Three Months Before Pregnancy, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	23.5	23.3	28.1	25.2	0.12
Alaska	32.5	33.2	31.2	33.5	0.86
Florida	23.2	25.7	24.3	24.1	0.92
Georgia	24.3	22.4	24.1	21.0	0.23
Maine	36.4	31.8	35.0	32.6	0.31
Michigan	33.3	30.8	29.5	32.1	0.55
New York‡	27.8	32.3	30.6	29.1	0.91
Oklahoma	31.8	33.2	35.6	31.0	0.96
South Carolina	26.3	25.1	23.3	27.8	0.70
Washington	not available	29.9	23.9	24.6	0.05†
West Virginia	36.8	34.4	39.5	40.2	0.07

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.

Year 2000 Health Objective 3.4h:

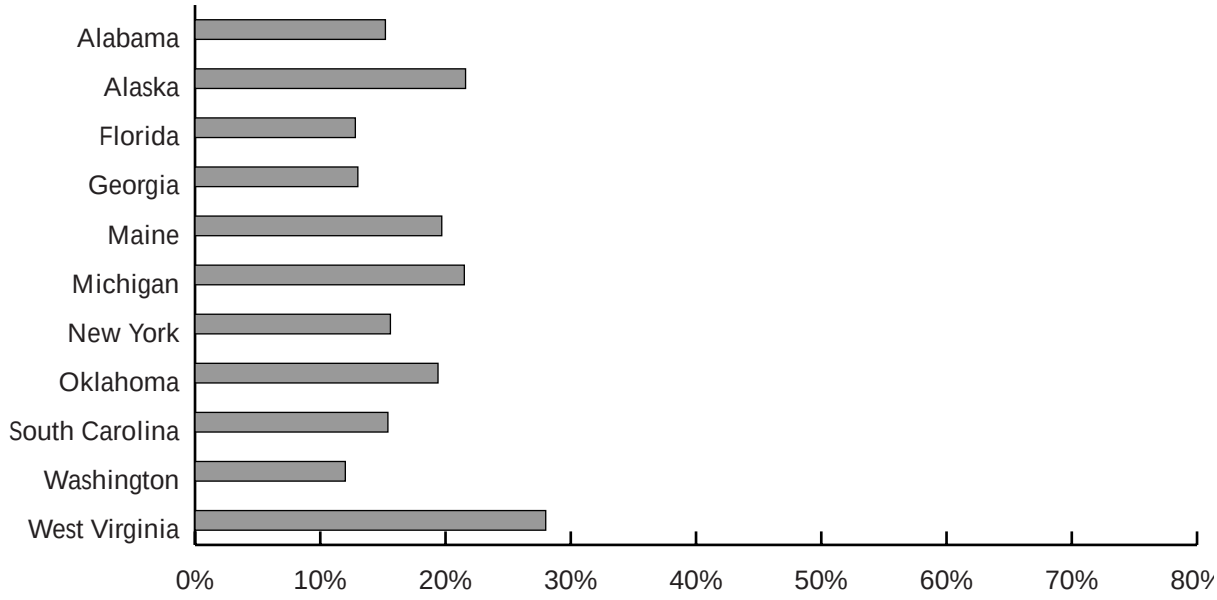
Reduce cigarette smoking to a prevalence of no more than 12% among women of reproductive age.

Prevalence of Smoking During the Last Three Months of Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,864	15.2	1.1	13.1–17.3
Alaska	1,268	21.6	1.3	19.1–24.1
Florida	1,949	12.8	1.1	10.7–14.9
Georgia	1,684	13.0	1.2	10.7–15.4
Maine	1,178	19.7	1.3	17.1–22.3
Michigan	1,584	21.5	1.7	18.2–24.8
New York‡	1,362	15.6	1.4	13.0–18.3
Oklahoma	2,004	19.4	1.5	16.4–22.3
South Carolina	2,055	15.4	1.1	13.2–17.6
Washington	2,108	12.0	1.2	9.7–14.4
West Virginia	1,457	28.0	1.7	24.7–31.3

*1996 state range is 12.0–28.0%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Smoking During the Last Three Months of Pregnancy, 1996



Prevalence of Smoking During the Last Three Months of Pregnancy, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	13.7	15.2	16.2	15.2	0.26
Alaska	20.9	20.8	18.1	21.6	0.88
Florida	13.6	14.3	13.3	12.8	0.48
Georgia	15.7	13.7	13.5	13.0	0.16
Maine	22.0	17.9	21.9	19.7	0.64
Michigan	23.2	21.1	19.5	21.5	0.39
New York‡	19.5	22.5	19.7	15.6	0.08
Oklahoma	22.0	22.7	22.9	19.4	0.30
South Carolina	15.7	14.3	13.8	15.4	0.76
Washington	not available	18.4	14.7	12.0	0.01†
West Virginia	27.0	23.5	27.5	28.0	0.34

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.

Year 2000 Health Objective 3.4i:

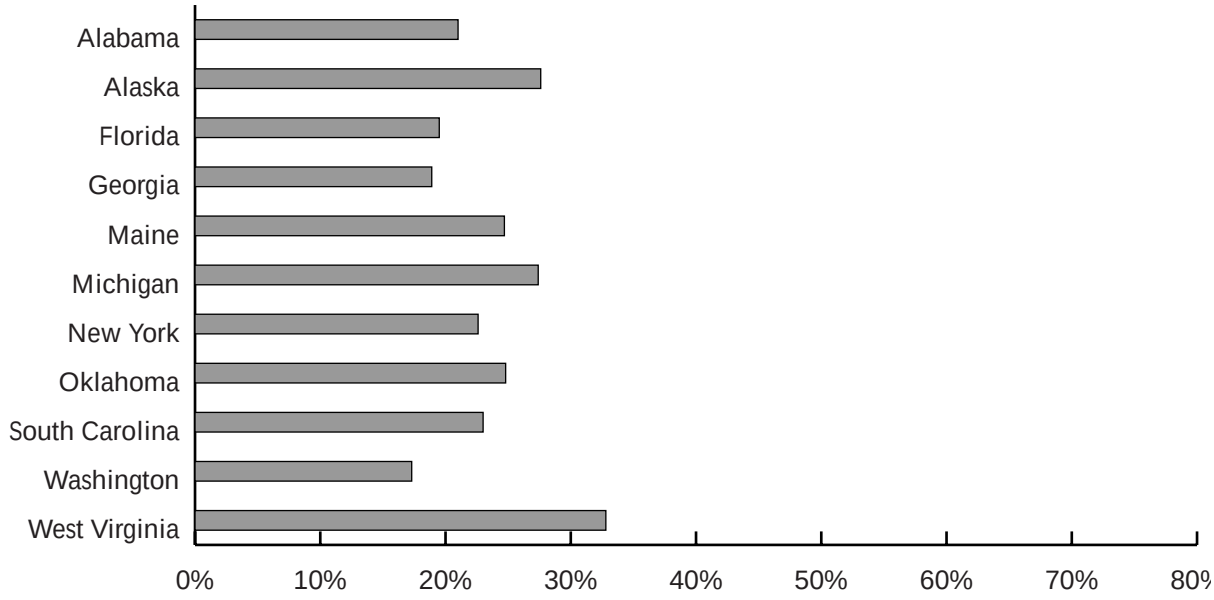
Reduce cigarette smoking to a prevalence of no more than 10% among pregnant women.

Prevalence of Smoking After Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,870	21.0	1.2	18.7–23.4
Alaska	1,276	27.6	1.4	24.9–30.3
Florida	1,957	19.5	1.3	17.0–22.0
Georgia	1,683	18.9	1.4	16.2–21.7
Maine	1,178	24.7	1.4	21.8–27.5
Michigan	1,438	27.4	1.9	23.8–31.0
New York‡	1,341	22.6	1.6	19.5–25.6
Oklahoma	2,010	24.8	1.6	21.6–28.0
South Carolina	2,065	23.0	1.3	20.4–25.6
Washington	2,102	17.3	1.4	14.6–20.0
West Virginia	1,474	32.8	1.7	29.4–36.2

*1996 state range is 17.3–32.8%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Smoking After Pregnancy, 1996



Prevalence of Smoking After Pregnancy, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	18.7	21.5	23.6	21.0	0.11
Alaska	26.5	26.3	25.2	27.6	0.73
Florida	18.3	20.9	19.9	19.5	0.74
Georgia	21.4	17.7	20.6	18.9	0.49
Maine	29.6	23.5	29.5	24.7	0.25
Michigan	27.7§	26.2	24.9	27.4	0.81
New York‡	24.2	26.5	27.6	22.6	0.60
Oklahoma	27.6	29.0	30.9	24.8	0.39
South Carolina	22.6	21.4	19.8	23.0	0.91
Washington	not available	24.6	19.1	17.3	0.01†
West Virginia	32.2	29.9	35.8	32.8	0.31

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.
§Missing at least 10% of data.

Year 2000 Health Objective 3.7:

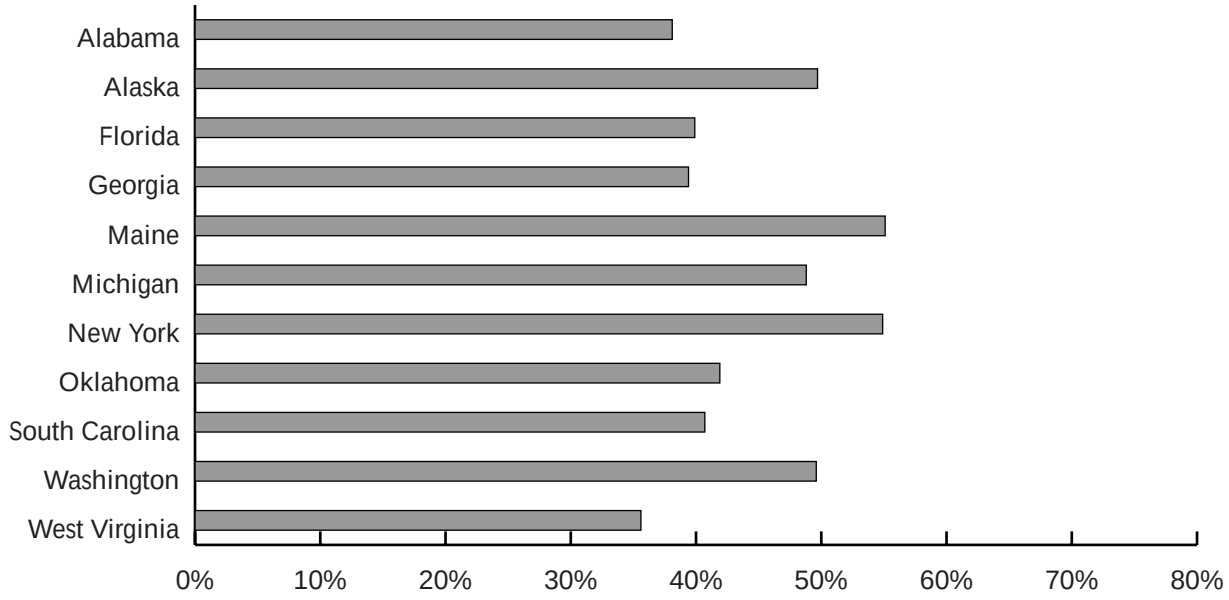
Increase smoking cessation during pregnancy so that at least 60% of women who are cigarette smokers at the time of becoming pregnant quit smoking and maintain abstinence for the remainder of their pregnancy.

Prevalence of Drinking Alcohol Three Months Before Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,855	38.1	1.5	35.2–41.0
Alaska	1,228	49.7	1.6	46.6–52.9
Florida	1,944	39.9	1.5	37.0–42.9
Georgia	1,671	39.4	1.7	36.2–42.7
Maine	1,171	55.1	1.6	51.9–58.3
Michigan	1,580	48.8	1.9	45.0–52.6
New York‡	1,337	54.9	1.8	51.3–58.5
Oklahoma	1,999	41.9	1.9	38.3–45.6
South Carolina	2,054	40.7	1.5	37.7–43.7
Washington	2,069	49.6	1.7	46.3–53.0
West Virginia	1,456	35.6	1.8	32.0–39.2

*1996 state range is 35.6–55.1%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Drinking Alcohol Three Months Before Pregnancy, 1996



Prevalence of Drinking Alcohol Three Months Before Pregnancy, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	38.2	33.2	35.3	38.1	0.79
Alaska	50.5	50.0	50.4	49.7	0.78
Florida	45.0	44.7	43.5	39.9	0.04†
Georgia	45.5	45.7	41.6	39.4	0.01†
Maine	54.8	57.3	52.6	55.1	0.65
Michigan	49.3	51.7	51.3	48.8	0.84
New York‡	56.6	55.8§	56.1	54.9	0.63
Oklahoma	39.4	41.8	46.1	41.9	0.22
South Carolina	40.6	37.0	35.7	40.7	0.87
Washington	not available	57.3	49.8	49.6	0.01†
West Virginia	33.4	34.4	37.3	35.6	0.24

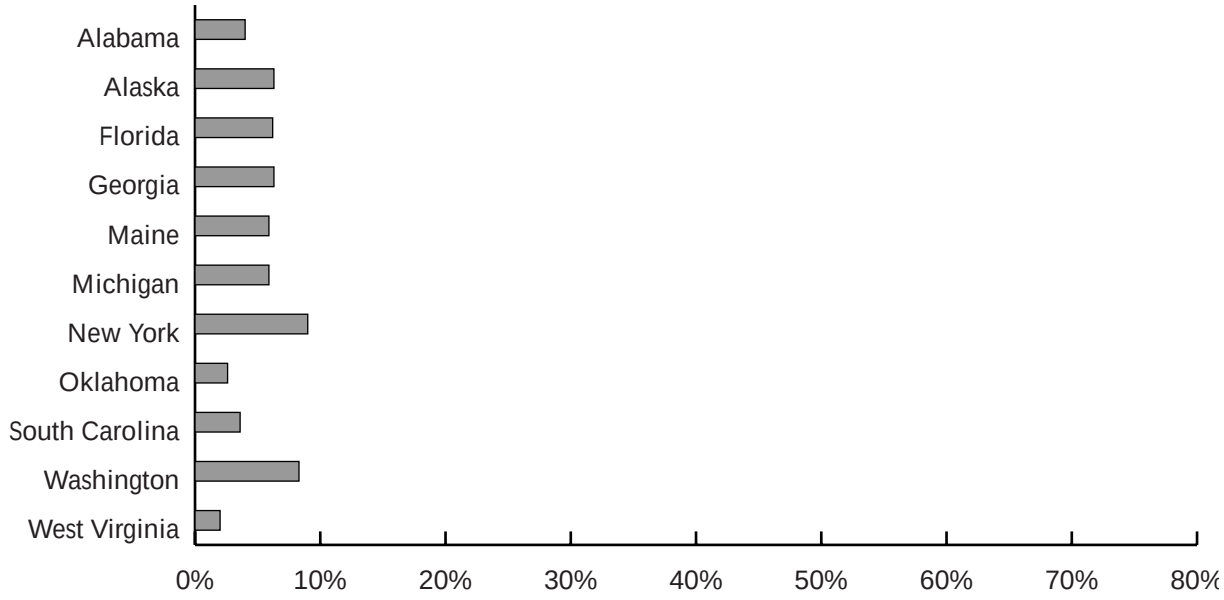
*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.
§Missing at least 10% of data.

Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,873	4.0	0.6	2.9–5.2
Alaska	1,257	6.3	0.8	4.8–7.9
Florida	1,932	6.2	0.8	4.7–7.7
Georgia	1,696	6.3	0.8	4.7–7.9
Maine	1,180	5.9	0.8	4.4–7.4
Michigan	1,587	5.9	0.9	4.1–7.7
New York‡	1,341	9.0	1.1	6.9–11.1
Oklahoma	2,016	2.6	0.6	1.5–3.8
South Carolina	2,051	3.6	0.6	2.4–4.7
Washington	2,105	8.3	1.0	6.4–10.3
West Virginia	1,485	2.0	0.5	1.0–3.1

*1996 state range is 2.0–9.0%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy, 1996



Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	4.8	3.3	5.0	4.0	0.79
Alaska	7.7	7.4	6.6	6.3	0.19
Florida	6.5	8.4	6.5	6.2	0.38
Georgia	9.0	12.7	8.6	6.3	0.01†
Maine	7.1	8.7	6.1	5.9	0.14
Michigan	6.7	7.2	5.8	5.9	0.36
New York‡	9.7§	7.8§	8.1	9.0	0.81
Oklahoma	7.0	5.2	5.1	2.6	0.00†
South Carolina	5.6	3.7	4.2	3.6	0.07
Washington	not available	7.8	8.2	8.3	0.73
West Virginia	3.3	3.3	3.0	2.0	0.13

*Based on a test for linear trend using logistic regression.
‡Data do not include New York City.
†*P* value is statistically significant at the 0.05 level.
§Missing at least 10% of data.

Year 2000 Health Objective 14.10:

Increase abstinence from alcohol by pregnant women by at least 20%.

Multistate Exhibits

HOSPITAL STAY FOR LABOR AND DELIVERY

PRAMS 1996 Surveillance Report

Hospital Stay for Labor and Delivery

Childbirth is the most common reason for admission to a U.S. hospital, with about four million deliveries occurring each year.[1] In recent years there has been widespread concern that shorter hospital stays after childbirth have a negative impact on maternal and infant well-being, and the media have devoted considerable attention to the problem of "drive-through deliveries."[2-3] In response, Congress passed the Newborns' and Mothers' Health Protection Act of 1996, which mandates minimum insurance coverage of 48-hour stays after vaginal deliveries, and 96-hour stays after cesarean deliveries, unless the mother and her physician decide otherwise. The Act also mandates follow-up by a health care worker within 72 hours for women and infants discharged within 48 hours.

One of the criteria formulated by the American College of Pediatrics and the American College of Obstetricians and Gynecologists for discharge *before* 48 hours postpartum is the availability of support systems in the home, particularly in the first few days following discharge.[4] Women lacking such systems, or having other social or economic risk factors, may require longer hospital stays to bond with their infants and to ensure they are ready to assume independent responsibility for the infant's care. Uninsured women may have difficulty accessing care after leaving the hospital, so it is unlikely that a shorter stay is in their interest. In 1995, uninsured women accounted for approximately 5% of all births in the United States, or around 200,000 births.[5]

Data from the National Hospital Discharge Survey (NHDS) showed that from 1970 to 1992 the average length of stay in U.S. hospitals decreased from 3.9 to 2.1 days for vaginal deliveries, and from 7.8 to 4.0 days for cesarean deliveries.[6] Another study using NHDS data[5] found that the average length of stay for all vaginal deliveries fell from 2.3 days in 1988 to 1.8 days in 1995, and the average length of stay for uncomplicated vaginal deliveries fell from 2.1 days to 1.5 days in the same time period. The analysis showed that several characteristics of the mother and of the hospital were independently associated with differences in length of stay for normal childbirth: region of the country, method of payment, and hospital size.

PRAMS asks women how long they stayed in the hospital when they gave birth. States can use these data to monitor trends in length of stay over time and to examine its variation by maternal characteristics and by type of insurance.

Data Highlights

- 1996 prevalence figures for hospital stays of one night or less for labor and delivery ranged from 8.2% in New York state to 50.2% in Washington State.

- From 1993 to 1995 the proportion of one-night stays for delivery increased steadily in each of the 13 states included in the 1995 PRAMS Surveillance Report, and the *P* values for the test for linear trends were significant. When 1996 data were added, however, there was some evidence that the trend was reversing itself in most states. The 1996 prevalence figure for one-night stays was higher than the 1995 figure in only two states

(Michigan and West Virginia). For most states, the 1996 figure was only slightly less than the 1995 figure, so the trend test still indicated a significant linear trend from 1993 to 1996 (it did not "catch" the reversal, but appropriately reflected the secular trend). In the other states (Georgia, New York, and Washington), the strong increasing trend from 1993 to 1995 was offset by the 1996 figure, and the trend over the entire time period did not register as statistically significant.

References

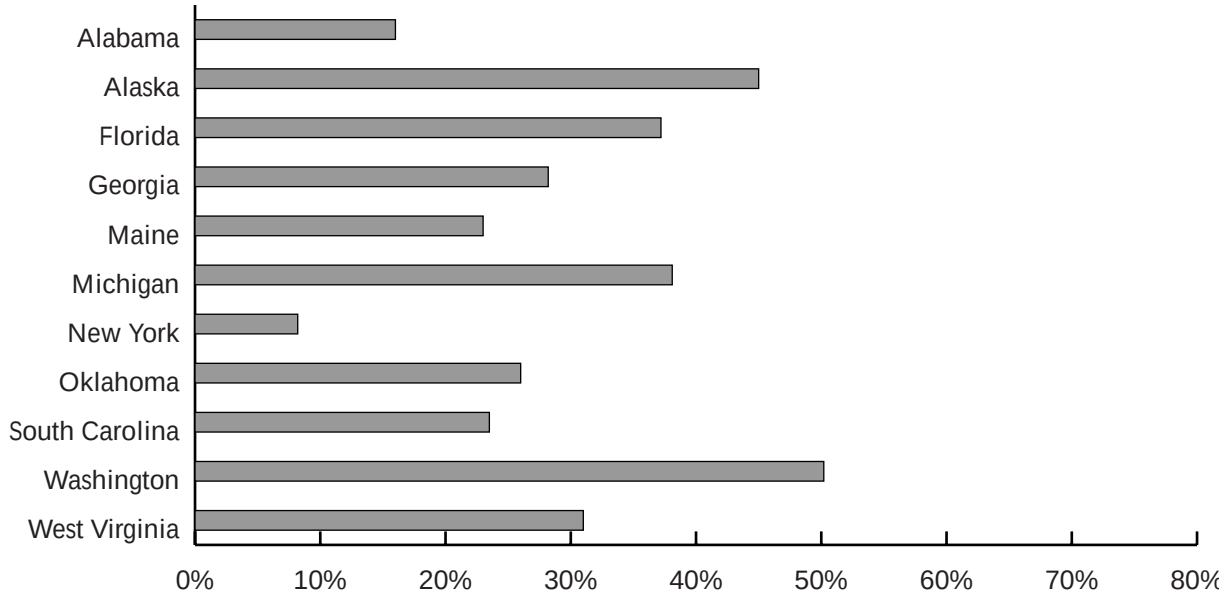
1. Agency for Health Care Policy and Research. The national bill for diseases treated in U.S. hospitals, 1987. Washington, DC: US Department of Health and Human Services, Public Health Service; 1994. Provider studies research note no. 19.
2. Charles S, Prystowsky B. Early discharge, in the end: maternal abuse, child neglect and physician harassment. Pediatrics 1995;96:746–7.
3. Parisi M, Meyer B. To stay or not to stay? That is the question. N Engl J Med 1995; 333:1635–7.
4. American Academy of Pediatrics. Committee on Fetus and Newborn. American College of Obstetricians and Gynecologists. Guidelines on obstetrics: maternal and fetal medicine. 3rd ed. Washington, DC: American College of Obstetricians and Gynecologists, 1992.
5. Danel I, Johnson C, Berg C, Flowers L, Atrash H. Length of maternal hospital stay for uncomplicated deliveries, 1988–1995: The impact of maternal and hospital characteristics. Maternal and Child Health Journal 1997 (in press).
6. Centers for Disease Control and Prevention. Trends in length of stay for hospital deliveries—United States, 1970–1992. Morb Mortal Wkly Rep 1995;44:335–7.
7. Foster D, Schneider L. Hospital length of stay and readmission rates for normal deliveries and newborns: relationship to hospital, patient and payer characteristics. Baltimore: HCIA Inc., 1995.

Prevalence of Hospital Stays of One Night or Less for Labor and Delivery, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,883	16.0	1.1	13.7–18.2
Alaska	1,299	45.0	1.5	42.0–48.1
Florida	1,964	37.2	1.5	34.2–40.1
Georgia	1,722	28.2	1.5	25.2–31.1
Maine	1,187	23.0	1.4	20.3–25.7
Michigan	1,449	38.1	1.9	34.2–41.9
New York‡	1,354	8.2	1.0	6.3–10.2
Oklahoma	2,045	26.0	1.7	22.7–29.2
South Carolina	2,076	23.5	1.3	20.9–26.1
Washington	2,120	50.2	1.7	46.9–53.6
West Virginia	1,540	31.0	1.7	27.5–34.4

*1996 state range is 8.2–50.2%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Hospital Stays of One Night or Less for Labor and Delivery, 1996



Prevalence of Hospital Stays of One Night or Less for Labor and Delivery, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	12.0	13.5	17.5	16.0	0.01†
Alaska	39.5	44.0	50.2	45.0	0.00†
Florida	26.7	35.6	39.1	37.2	0.00†
Georgia	28.7	33.2	37.6	28.2	0.72
Maine	17.4	20.5	29.0	23.0	0.00†
Michigan	23.3	30.4	35.7	38.1	0.00†
New York‡	9.2	10.7	16.4	8.2	0.71
Oklahoma	19.9	25.7	30.1	26.0	0.01†
South Carolina	18.1	20.5	29.3	23.5	0.00†
Washington	not available	51.6	57.3	50.2	0.60
West Virginia	20.1	27.1	29.7	31.0	0.00†

*Based on a test for linear trend using logistic regression.
†*P* value is statistically significant at the 0.05 level.
‡Data do not include New York City.

Multistate Exhibits

INFANTS PLACED IN INTENSIVE CARE UNIT

PRAMS 1996 Surveillance Report

Infants Placed in Intensive Care Unit

Intensive care for newborn infants usually entails close monitoring of heartbeat, temperature, and blood chemistry; mechanical ventilation or oxygen supplementation, and intravenous feeding. Low birthweight (less than 2500g or 5 lbs., 8 oz.) is the most common proximate reason for admission to a neonatal intensive care unit (NICU). Infants with birth defects (such as surgical anomalies, congenital heart defects, and neural tube defects), infections, and anemia may also be admitted, depending on the severity of the condition.[1,2]

In the United States, more than 200,000 low birthweight babies are born every year.[3] Preterm infants often have inadequate weight, and their organ systems are immature. They have difficulty in breathing unassisted. They are more likely to die early, and those who survive may suffer blindness (retinopathy), impaired motor function, stunted growth, and even developmental problems into adult life.[2] Any infant whose weight is below the 10th percentile for gestational age, whether premature, full-term, or postmature, is classified as small for gestational age. A full-term infant who is small for gestational age does not have the problems related to organ system immaturity that the premature infant has but is at increased risk for asphyxiation during labor, meconium aspiration, and hypoglycemia.

NICUs have made tremendous strides in the survival of low birthweight infants, especially with the advent of aggressive resuscitative measures for extremely low birthweight infants (those weighing less than 1000g) in recent years. Appropriate medical attention can also head off some of the long-term sequelae of low birthweight or a birth defect, such as chronic lung disease or neurological disability. However, providing care for very low birthweight infants accounts for a high proportion of expenditures on intensive care for neonates, which is often so costly that hospitals shift costs to other functions to avoid net revenue losses.[1,4] Prenatal care programs targeted at teens, smokers, and other pregnant women at risk can effectively reduce the incidence of poor birth outcomes and their associated costs.[5]

A rising trend in the proportion of infants admitted to a NICU does not necessarily reflect worse outcomes in a state's population of births. The increase may be due to increased hospital resources or increased capacity, such as the opening of a level III NICU in a major city or other important catchment area. It may also reflect more effective efforts to identify and track women at increased risk so that they give birth at a tertiary care facility.

Data Highlights

- In 1996, the prevalence of admitting a live-born infant to an intensive care unit ranged from 7.8% in Maine to 12.5% in Florida.
- From 1993 to 1996, the proportion of infants admitted to intensive care in South Carolina fell from 11.1% to 9.0%. From 1993 to 1995, this proportion rose from 11.4% to 15.0% in Alabama, but it fell back to 10.1% in 1996.

References

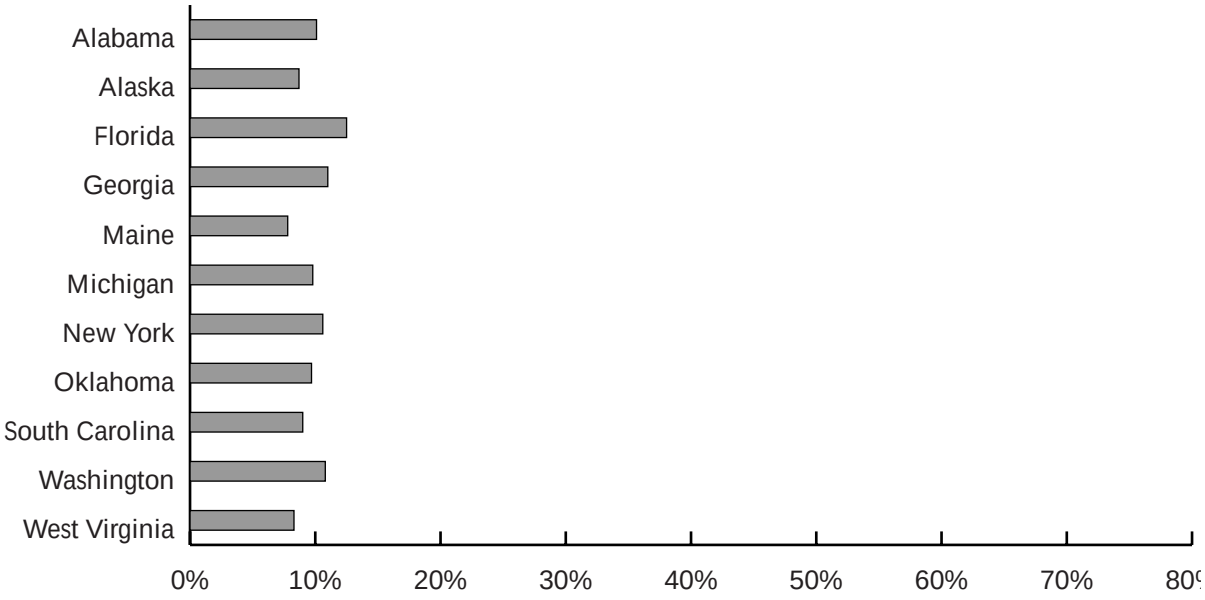
1. Imershein AW, Turner C, Wells JG, Pearman A. Covering the costs of care in neonatal intensive care units. Pediatrics 1992; 89(1):5661.
2. Saigal S. Global outcome of high-risk infants at school age. In: Baum JD, editor. Birth risks. New York: Raven Press, 1993; 203-10. (Nestle Nutrition Workshop Series Vol. 31).
3. Ventura SJ, Peters KD, Martin JA, Maurer JD. Births and deaths: United States, 1996. Mon Vital Stat Rep 1997; 46(1), suppl 2.
4. Lewit EM, Baker LS, Hope C, Shiono PH. The direct cost of low birthweight. Future Child 1995; 5(1):35–56.
5. Oster G, Delea TE, Colditz GA. The penalties of smoking: low birthweight and increased neonatal care costs. In: Rosenberg MJ, editor. Smoking and reproductive health. Littleton, MA: PSG Publishing Company, 1987:210–14.

Prevalence of Infants Placed in Intensive Care Unit, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,869	10.1	0.8	8.7–11.6
Alaska	1,302	8.7	0.8	7.2–10.2
Florida	1,933	12.5	0.9	10.8–14.2
Georgia	1,700	11.0	0.9	9.2–12.8
Maine	1,180	7.8	0.8	6.3–9.3
Michigan	1,434	9.8	1.0	7.9–11.7
New York‡	1,343	10.6	1.0	8.7–12.5
Oklahoma	2,022	9.7	0.9	7.8–11.5
South Carolina	2,052	9.0	0.7	7.5–10.4
Washington	2,081	10.8	1.1	8.8–12.9
West Virginia	1,516	8.3	0.9	6.6–10.1

*1996 state range is 7.8–12.5%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Infants Placed in Intensive Care Unit, 1996



Prevalence of Infants Placed in Intensive Care Unit, 1993–1996

State	1993 (%)	1994 (%)	1995 (%)	1996 (%)	Trend *P* value*
Alabama	11.4	14.2	15.0	10.1	0.45
Alaska	7.3	8.8	6.9	8.7	0.51
Florida	14.3	14.6	12.3	12.5	0.09
Georgia	12.7	10.9	12.0	11.0	0.34
Maine	8.0	10.5	10.0	7.8	0.82
Michigan	11.3	10.3	11.7	9.8	0.53
New York‡	10.4	10.5	11.3	10.6	0.78
Oklahoma	10.4	9.0	9.4	9.7	0.74
South Carolina	11.1	11.8	10.1	9.0	0.03†
Washington	not available	9.9	11.8	10.8	0.53
West Virginia	8.3	9.5	8.6	8.3	0.86

*Based on a test for linear trend using logistic regression.
‡Data do not include New York City.
†*P* value is statistically significant at the 0.05 level.

Year 2000 Health Objective 14.11:

Increase to at least 90% the proportion of pregnant women and infants who receive risk-appropriate care.

Multistate Exhibits

INFANT SLEEP POSITION

PRAMS 1996 Surveillance Report

Infant Sleep Position

Infant sleep position has been identified as a modifiable behavior that can decrease the risk for sudden infant death syndrome (SIDS).[1] SIDS is a diagnosis for the sudden death of an infant less than one year of age that remains unexplained after a complete investigation, which includes an autopsy, examination of the death scene, and a review of the symptoms or illnesses the infant had before dying and any other pertinent medical history.[2] In 1995, the postneonatal mortality rate for SIDS in the United States was 81.5 deaths/100,000 live births, and SIDS was the leading cause of death among infants between one month and one year of age.[3]

The risk of SIDS peaks at two to four months of age, and approximately 90% of SIDS cases occur in children less than six months of age.[4] In the United States, the incidence of SIDS is highest during winter months; among American Indian, black, and male infants; and among infants weighing less than 2500 grams at birth.[4–6] Maternal characteristics recognized as risk factors for SIDS include young age, not completing high school, use of tobacco or illicit drugs during pregnancy, low income, and late entry into or no prenatal care.

The etiology and pathogenesis of SIDS remains unknown. Nevertheless, cohort and case-control studies report increased risk of SIDS ranging from 3.9 to 9.3 when an infant is placed in a prone position (on stomach) compared with other positions.[7] Researchers postulate that a prone sleep position may cause airway obstruction or a thermal imbalance or may interfere with arousal if the airway is obstructed. Although sleep position alone will not eliminate SIDS, the magnitude of study findings have prompted the medical community to encourage mothers to avoid placing their infants in a prone position unless medically warranted. In 1994, the Centers for Disease Control and Prevention announced a nationwide "Back to Sleep" campaign to encourage mothers to place their newborns on their backs. A goal of this campaign is to reduce the percentage of babies who are placed on their stomachs or sides to less than 10%. More recently, since November 1996, the American Academy of Pediatrics has preferentially recommended putting infants to sleep on their backs because of the lower risk of SIDS associated with this position than with the side position.[8]

Data Highlights

- In 1996, at least 25% of responding mothers reported placing their newborn infant on his or her back most of the time. Mothers in Georgia were least likely to put their infant to sleep in the back position (24.5%), and mothers in Washington were most likely to use the back position (42.9%).

- In 1996, the side sleep position was the most common position in all states, except for Alaska and Washington. State prevalences of side sleep position ranged from 36.1% (Oklahoma) to 46.4% (Maine).

References

1. Centers for Disease Control and

Prevention. Guidelines for death scene investigation of sudden, unexplained infant deaths: recommendations of the Interagency Panel on Sudden Infant Death Syndrome. Morb Mortal Wkly Rep 1996;45(RR-10):1–6.

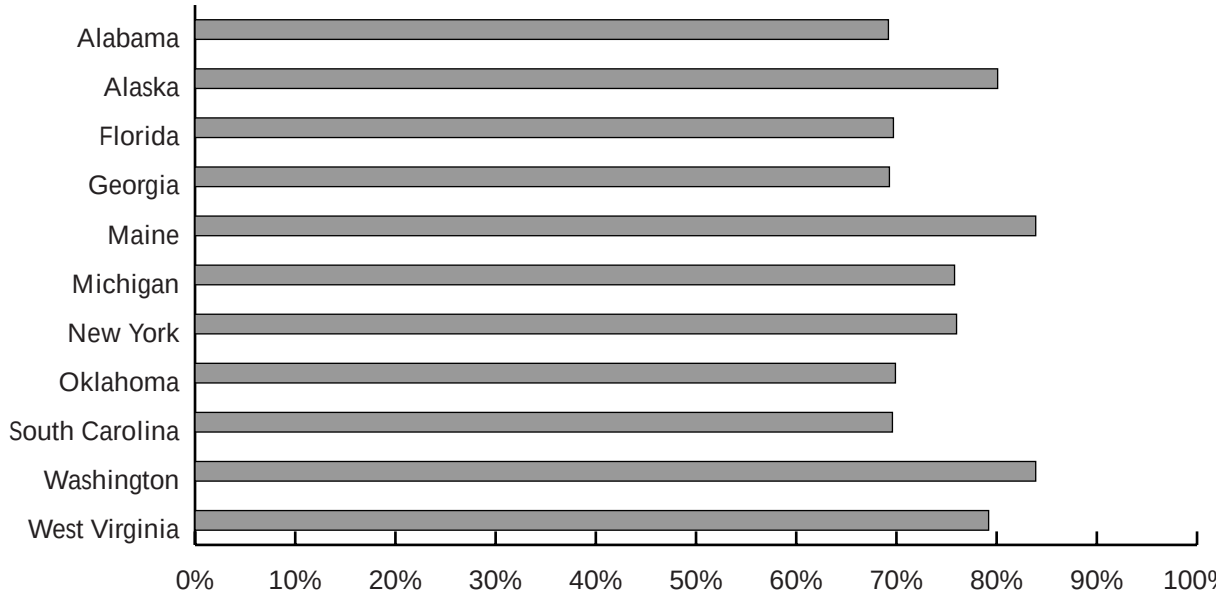
2. Willinger M, James LS, Catz C. Defining the sudden infant death syndrome (SIDS): deliberations of an expert panel convened by the National Institute of Child Health and Human Development. Pediatr Pathol 1991;11:677–84.
3. Anderson RN, Kochanek KD, Murphy SL. Report of final mortality statistics, 1995. Mon Vital Stat Rep 1997; 45(11), suppl 2.
4. Hoffman HJ, Hillman LS. Epidemiology of the sudden infant death syndrome: maternal, neonatal, and post-neonatal risk factors. Clin Perinatol 1992;19(4):717–37.
5. Centers for Disease Control. Seasonality in sudden infant death syndrome — United States, 1980–1987. MMWR 1990;39(49):891–5.
6. Hoffman HJ, Damus K, Hillman L, Krongrad E. Risk factors for SIDS. Results of the National Institute of Child Health and Human Development SIDS Cooperative Epidemiological Study. Ann N Y Acad Sci 1988; 533:13–30.
7. Guntheroth WG, Spiers PS. Sleeping prone and the risk of sudden infant death syndrome. JAMA 1992;267(17):2359–62.
8. American Academy of Pediatrics Task Force on Infant Positioning and SIDS. Positioning and sudden infant death syndrome (SIDS): update. Pediatrics 1996;98:1216–8.

Prevalence of Sleeping Position on Back or Side, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,769	69.2	1.4	66.4–72.0
Alaska	971	80.1	1.4	77.3–82.9
Florida	1,861	69.7	1.4	67.0–72.5
Georgia	1,545	69.3	1.6	66.3–72.4
Maine	1,143	83.9	1.2	81.5–86.3
Michigan	1,348	75.8	1.7	72.5–79.2
New York‡	1,248	76.0	1.6	72.8–79.2
Oklahoma	1,825	69.9	1.8	66.5–73.4
South Carolina	1,885	69.6	1.4	66.7–72.4
Washington	1,532	83.9	1.5	80.9–86.8
West Virginia	1,412	79.2	1.6	76.1–82.2

*1996 state range is 69.2–83.9%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Sleeping Position on Back or Side, 1996

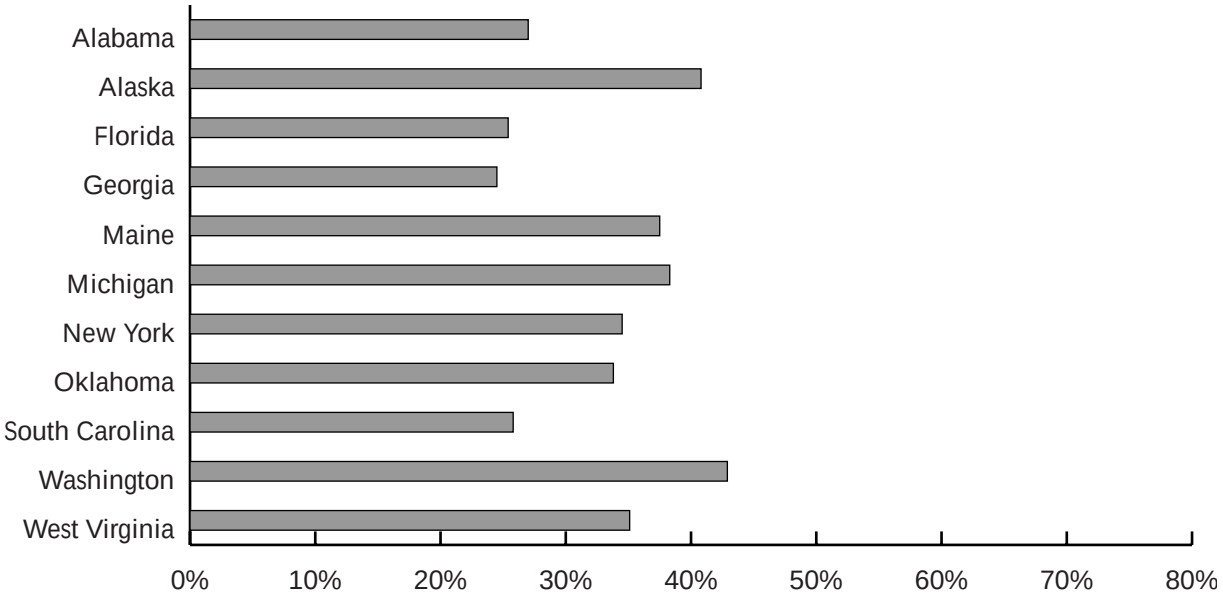


Prevalence of Sleeping Position on Back, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,769	27.0	1.4	24.3–29.7
Alaska	971	40.8	1.7	37.4–44.2
Florida	1,861	25.4	1.4	22.7–28.1
Georgia	1,545	24.5	1.5	21.5–27.5
Maine	1,143	37.5	1.6	34.4–40.7
Michigan	1,348	38.3	2.0	34.4–42.2
New York‡	1,248	34.5	1.8	31.1–38.0
Oklahoma	1,825	33.8	1.8	30.2–37.3
South Carolina	1,885	25.8	1.4	23.1–28.5
Washington	1,532	42.9	2.0	39.0–46.8
West Virginia	1,412	35.1	1.8	31.5–38.7

*1996 state range is 24.5–42.9. †Confidence interval. ‡Data do not include New York City.

Prevalence of Sleeping Position on Back, 1996

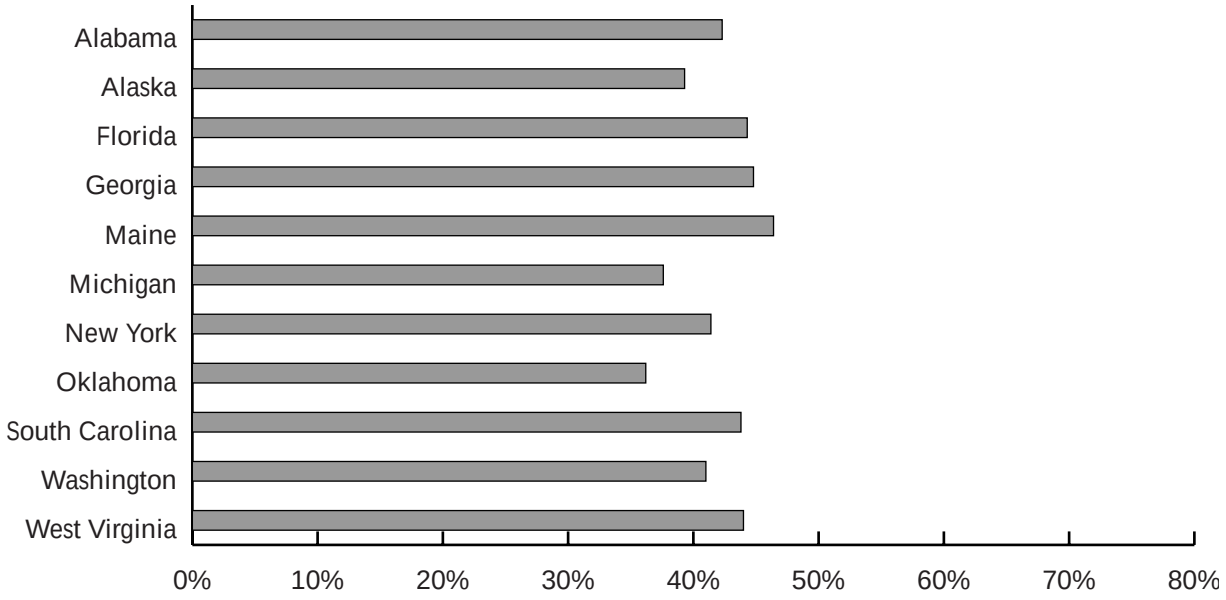


Prevalence of Sleeping Position on Side, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,769	42.3	1.5	39.3–45.3
Alaska	971	39.3	1.7	35.9–42.6
Florida	1,861	44.3	1.6	41.3–47.4
Georgia	1,545	44.8	1.7	41.4–48.2
Maine	1,143	46.4	1.6	43.2–49.7
Michigan	1,348	37.6	2.0	33.7–41.4
New York‡	1,248	41.4	1.8	37.8–45.1
Oklahoma	1,825	36.2	1.8	32.5–39.8
South Carolina	1,885	43.8	1.6	40.7–46.8
Washington	1,532	41.0	2.0	37.1–44.8
West Virginia	1,412	44.0	1.9	40.3–47.8

*1996 state range is 36.2–46.4. †Confidence interval. ‡Data do not include New York City

Prevalence of Sleeping Position on Side, 1996



Multistate Exhibits

PRENATAL HIV COUNSELING AND TESTING

PRAMS 1996 Surveillance Report

Prenatal HIV Counseling and Testing

Human immunodeficiency virus (HIV) infection, the infection that causes AIDS, remains a major cause of illness and death among women and children. In the United States in 1995, AIDS was the third leading cause of death among women aged 25 to 44 years and was the leading cause of death among black women in this age group.[1] Transmission of HIV from an infected woman to her fetus or newborn can occur during pregnancy, during delivery (intrapartum), or after delivery through breast-feeding. Prospective studies have reported perinatal transmission rates ranging from 13% to 40%.[2–6]

In 1994, a multicenter, placebo-controlled clinical trial (ACTG 076) demonstrated that administration of zidovudine (ZDV) therapy to a selected group of HIV-infected women during pregnancy, labor, and delivery and to their newborns reduced the risk of perinatal HIV transmission by approximately two-thirds. One fourth (25.5%) of infants born to mothers in the placebo group were infected, whereas only 8.3% of infants born to mothers in ZDV group were infected.[7] Subsequent clinical trials have further supported the efficacy of prenatal ZDV therapy.

On the basis of these results, in 1995 the Public Health Service announced guidelines recommending that all health care providers offer universal HIV counseling and voluntary testing to women during routine prenatal care.[8] Counseling and voluntary testing during prenatal care provide an opportunity to identify women who may not know or acknowledge their risk for HIV infection. Studies among women seeking prenatal care have found that when testing efforts were focused on women who reported a risk factor, between 44% and 62% of HIV infected women were not identified.[9-11] Further, in four states, a recent evaluation of the impact of these guidelines on reducing perinatal transmission found that the proportion of HIV-infected pregnant women whose infection was diagnosed before delivery increased from 68% in 1993 to 81% in 1996.[12]

As of 1996, PRAMS data on HIV counseling and discussions of testing inform public health authorities and policymakers about the level of implementation of these recommendations in the general childbearing population.

Data Highlights

- In 1996, between 42.2% and 56% of women recalled their health care provider discussing HIV prevention with them during prenatal care. Recollection was highest among mothers from South Carolina (56%) and lowest among mothers from New York State (42.2%).

- In 1996, between 59.6% and 84.5% of women recalled their health care provider discussing getting their blood tested for HIV. Discussions about testing were most prevalent among mothers from Michigan (84.5%) and lowest among mothers from Oklahoma (59.6%).

References

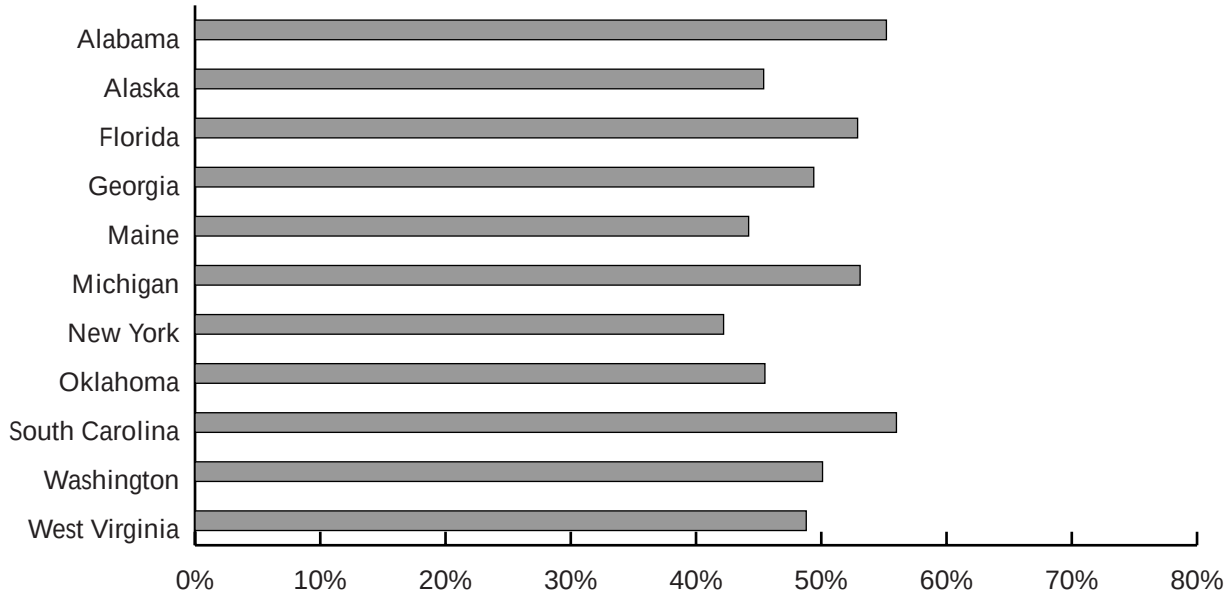
1. Anderson RN, Kochanek MA, Murphy SL. Report of final mortality statistics, 1995. Mon Vital Stat Rep 1997; 45(11).
2. Ryder RW, Nsa W, Hassig SE, Behets F, Rayfield M, Ekungola B, et al. Perinatal transmission of human immunodeficiency virus type 1 to infants of seropositive women in Zaire. N Engl J Med 1989;320:1637–42.
3. Blanche S, Rouzioux C, Muscato ML, Veber F, Mayaux MJ, Jacomet C, et al. A prospective study of infants born to women seropositive for human immunodeficiency virus type 1. N Engl J Med 1989;320:1643–8.
4. European Collaborative Study. Risk factors for mother-to-child transmission of HIV-1. Lancet 1992;339:1007–12.
5. Gabiano C, Tovo *P*-A, de Martino M, Galli L, Giaquinto C, Loy A, et al. Mother-to-child transmission of human immunodeficiency virus type 1: risk of infection and correlates of transmission. Pediatrics 1992;90:369–74.
6. Dabis F, Msellati *P*, Dunn D, Lepage *P*, Newell ML, Peckham C, et al. Estimating the rate of mother-to-child transmission of HIV. Report of a workshop on methodological issues — Ghent, Belgium, 17–20 February, 1992. AIDS 1993;7:1139–48.
7. Connor EM, Sperling RS, Gelber R, Kiselev *P*, Scott G, O'Sullivan MJ, et al. Reduction of maternal-infant transmission of human immunodeficiency virus type 1 with zidovudine treatment. N Engl J Med 1994;331:1173–80.
8. Centers for Disease Control and Prevention. U.S. Public Health Service recommendations for human immunodeficiency virus counseling and voluntary testing for pregnant women. Morb Mort Wkly Rep 1995;44(RR-7).
9. Barbacci M, Quinn T, Kline R, Repke J, Chaisson R. Failure of targeted screening to identify HIV+ pregnant women. Int Conf AIDS 5:222(abstract no. M.B.*P*.5), 1989 Jun 4–9.
10. DeFerrari E, Anderson J, White-Hamilton J. A midwifery model for HIV-infected pregnant women. Int Conf AIDS 8(2):B155 (abstract no. PoB 3410), 1992 Jul 19–24.
11. Jackson J, Frederick T, Mascola L. Five years of successful prenatal HIV screening in Los Angeles County: a pilot for the nation. Natl Conf Hum Retroviruses Relat Infect (2nd). P160, 1995 Jan29–Feb2.
12. Centers for Disease Control. Success in implementing Public Heath Service guidelines to reduce perinatal transmission of HIV — Louisiana, Michigan, New Jersey, and South Carolina, 1993, 1995, and 1996. Morb Mort Wkly Rep 1998; 47:688–91.

Prevalence of Counseling on HIV Prevention During Prenatal Care, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,847	55.2	1.4	52.4–58.0
Alaska	1,003	45.4	1.7	42.1–48.8
Florida	1,908	52.9	1.6	49.8–55.9
Georgia	1,582	49.4	1.7	46.1–52.7
Maine	1,171	44.2	1.6	40.9–47.4
Michigan	1,536	53.1	1.9	49.3–56.9
New York‡	1,326	42.2	1.8	38.6–45.8
Oklahoma	1,979	45.5	1.9	41.8–49.2
South Carolina	1,995	56.0	1.5	53.0–59.1
Washington	1,530	50.1	2.0	46.2–54.0
West Virginia	1,462	48.8	1.9	45.1–52.6

*1996 state range is 42.2–56.0. †Confidence interval. ‡Data do not include New York City.

Prevalence of Counseling on HIV Prevention During Prenatal Care, 1996

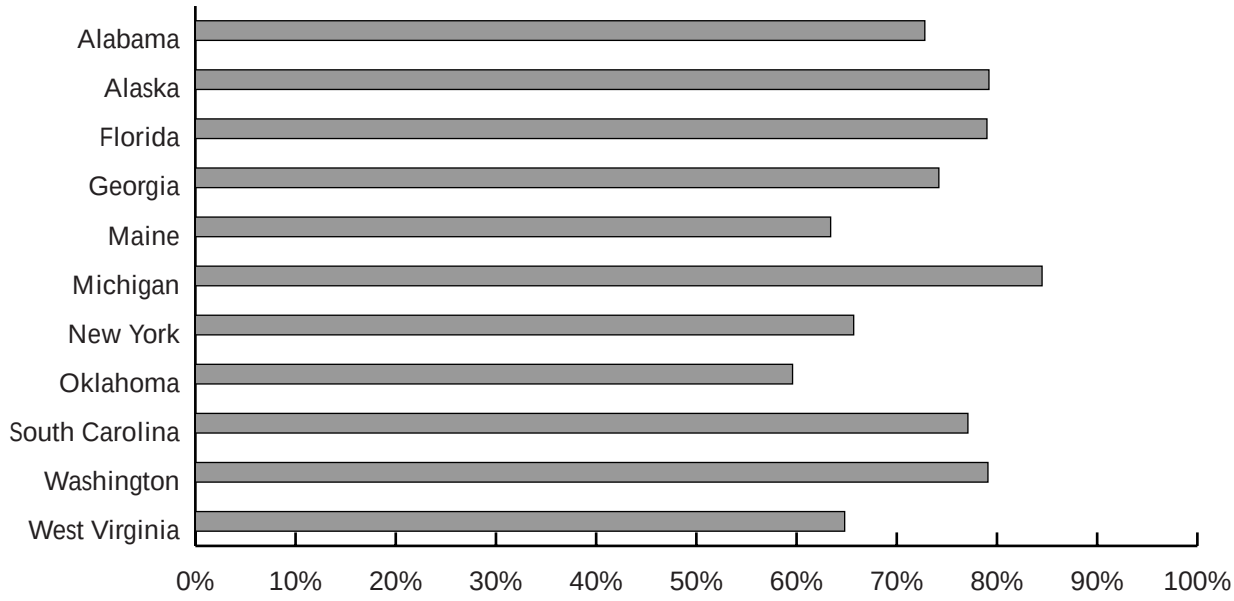


Prevalence of Discussion of HIV Testing During Prenatal Care, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,843	72.8	1.3	70.1–75.4
Alaska	1,008	79.2	1.4	76.5–81.9
Florida	1,901	79.0	1.3	76.4–81.5
Georgia	1,586	74.2	1.5	71.2–77.2
Maine	1,171	63.4	1.6	60.2–66.5
Michigan	1,538	84.5	1.4	81.7–87.4
New York‡	1,330	65.7	1.7	62.4–69.1
Oklahoma	1,978	59.6	1.9	56.0–63.2
South Carolina	1,997	77.1	1.3	74.6–79.7
Washington	1,536	79.1	1.6	75.9–82.4
West Virginia	1,462	64.8	1.8	61.2–68.4

*1996 state range is 59.6–84.5%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Discussion of HIV Testing During Prenatal Care, 1996



Multistate Exhibits

PHYSICAL ABUSE

PRAMS 1996 Surveillance Report

Physical Abuse

Physical violence against women during pregnancy is recognized as a serious health concern for the mother and the infant.[1] Physical violence resulting in abdominal trauma can lead to fetal loss; early onset of labor and delivery of a preterm, low birthweight infant; fetal bone fracture; rupture of the mother's uterus; and antepartum hemorrhage.[2,3] Women who are involved in violence or who are physically assaulted during their pregnancy are significantly more likely to have fetal death or distress[4] and to have preterm labor.[5]

The prevalence of physical violence experienced during pregnancy in the United States is not known; however, in 1990 and 1991, 3.8% to 6.9% of women across 4 states reported experiencing physical violence during the 12 months before their infant's birth.[6] Higher rates of physical violence were reported among women who had unwanted or mistimed pregnancies, were not white, were less than 20 years of age, were unmarried, had less than 12 years of education, lived in crowded living quarters, received WIC benefits, or entered prenatal care after the first trimester than among women who did not have these characteristics. Physical violence during pregnancy has been identified as being significantly associated with low birthweight outcome, poor maternal weight gain, infection, anemia, smoking, and alcohol and drug use.[7]

In 1996, mothers responding to the PRAMS questionnaire were asked whether they were physically abused by a husband or partner during the 12 months preceding their most recent pregnancy or during their most recent pregnancy. Knowledge of physical violence experienced during or before pregnancy can guide policymakers and program planners in designating funds and support for referral services.

Data Highlights

- Among women who delivered a live-born infant in 1996, between 4.4% (Maine) and 7.6% (Oklahoma) acknowledged being physically abused during the 12 months before their most recent pregnancy.
- In 1996, between 2.9% (Maine) and 5.7% (Alaska) of women reported that they experienced physical abuse during their most recent pregnancy. A greater percentage of women across all states reported less physical violence during their pregnancy than before they became pregnant.

References

1. American College of Obstetricians and Gynecologists. The battered woman. Technical bulletin no. 124. Washington, DC: American College of Obstetricians and Gynecologists, 1989.
2. Pearlman MD, Tintinalli JE, Lorenz RP. Blunt trauma during pregnancy. N Engl J Med 1990;323:1609–13.
3. Sammons LN. Battered and pregnant. Am J Matern Child Nurs 1981;6:246–50.
4. Centers for Disease Control and Prevention. Physical violence during

the 12 months preceding childbirth — Alaska, Maine, Oklahoma, and West Virginia, 1990–1991. Morb Mort Wkly Rep 1994; 43:132–7.
5. Dye TD, Tollivert NJ, Lee RV, Kenney CJ. Violence, pregnancy and birth outcome in Appalachia. Paediatr Perinat Epidemiol 1995;9:35–47.
6. Berenson AB, Wiemann CM, Wilkinson GS, Jones WA. Perinatal morbidity associated with violence experienced by pregnant women. Am J Obstet Gynecol 1994;170:1760–9.
7. Parker B, McFarlane J, Soeken K. Abuse during pregnancy: effects on maternal complications and birthweight in adult and teenage women. Obstet Gynecol 1994;84:323–8.

Year 2000 Health Objective 7.5:

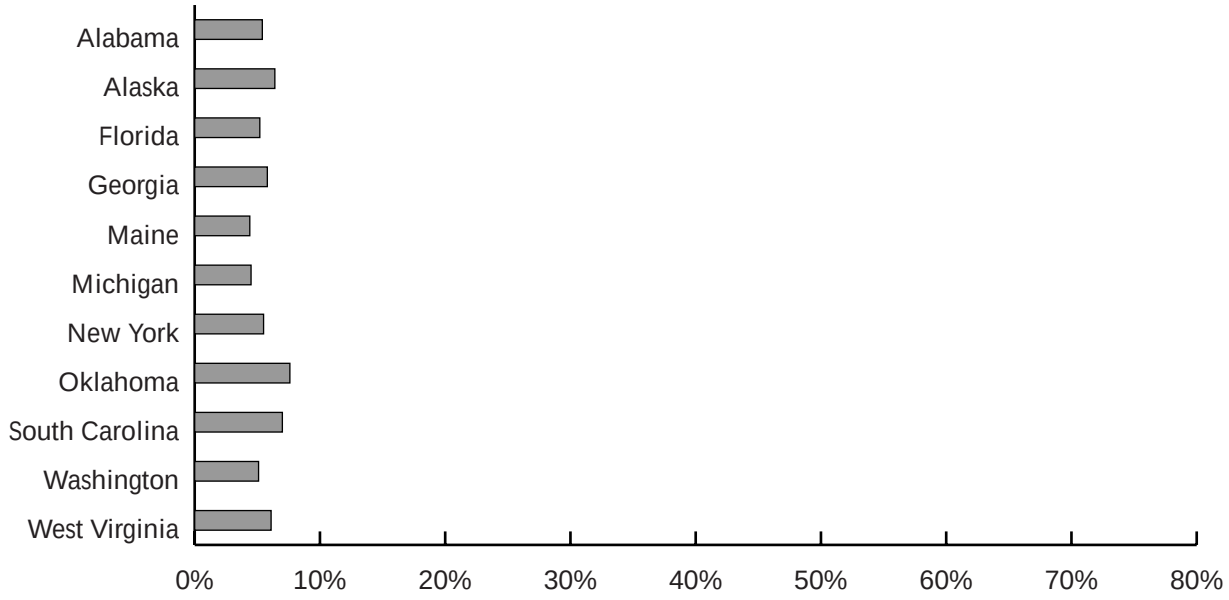
Reduce physical abuse directed at women by male partners to no more than 27/1000 couples.

Prevalence of Physical Abuse by Husband/Partner During 12 Months Before Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,857	5.4	0.7	4.1–6.7
Alaska	986	6.4	0.8	4.9–7.9
Florida	1,888	5.2	0.7	3.8–6.6
Georgia	1,619	5.8	0.8	4.4–7.3
Maine	1,138	4.4	0.7	3.0–5.8
Michigan	1,563	4.5	0.8	2.9–6.2
New York‡	1,298	5.5	0.9	3.6–7.3
Oklahoma	1,979	7.6	1.0	5.5–9.6
South Carolina	2,033	7.0	0.8	5.4–8.5
Washington	1,552	5.1	0.9	3.4–6.8
West Virginia	1,454	6.1	0.9	4.4–7.8

*1996 state range is 4.4–7.6%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Physical Abuse by Husband/Partner During 12 Months Before Pregnancy, 1996

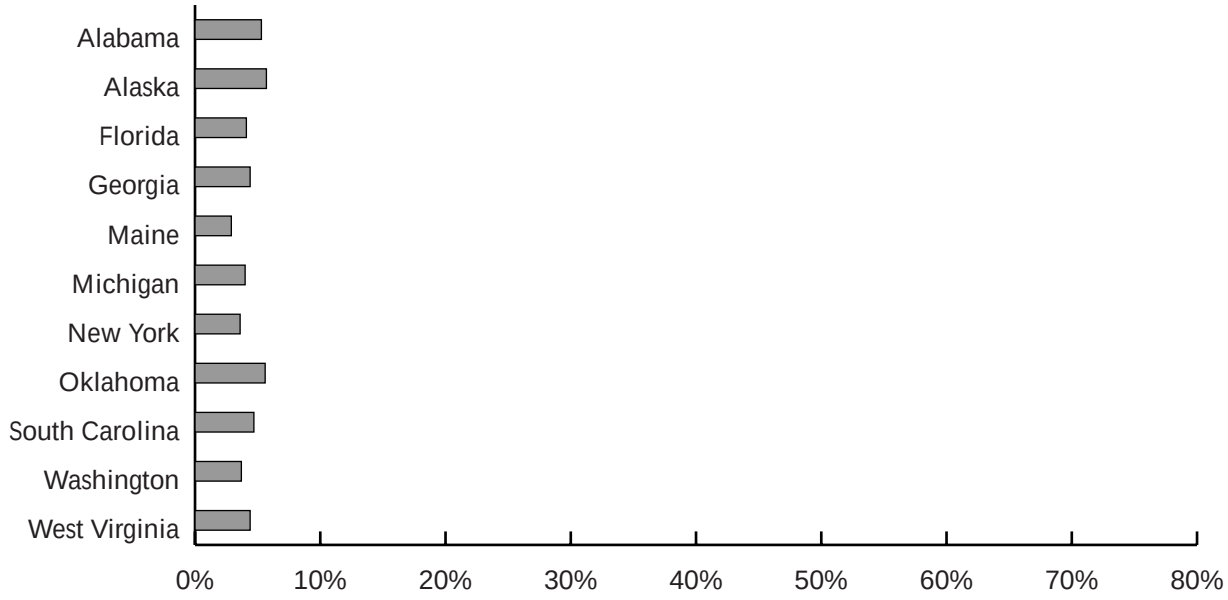


Prevalence of Physical Abuse by Husband/Partner During Most Recent Pregnancy, 1996

State	Sample Size	Percent*	Standard Error	95% CI†
Alabama	1,876	5.3	0.7	4.0–6.6
Alaska	1,022	5.7	0.7	4.3–7.2
Florida	1,912	4.1	0.6	2.9–5.2
Georgia	1,637	4.4	0.7	3.2–5.7
Maine	1,166	2.9	0.6	1.8–4.0
Michigan	1,586	4.0	0.8	2.4–5.6
New York‡	1,318	3.6	0.8	2.1–5.1
Oklahoma	2,009	5.6	0.9	3.9–7.4
South Carolina	2,049	4.7	0.7	3.4–6.1
Washington	1,565	3.7	0.7	2.3–5.0
West Virginia	1,489	4.4	0.7	3.0–5.8

*1996 state range is 2.9–5.7%. †Confidence interval. ‡Data do not include New York City.

Prevalence of Physical Abuse by Husband/Partner During Most Recent Pregnancy, 1996



State Exhibits

ALABAMA

PRAMS 1996 Surveillance Report

ALABAMA 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample size	Percent	Standard error	95% CI†
Age, years				
<20		18.6		
20–24		29.8		
25–34		43.6		
35+		8.0		
Race				
White		66.0		
Black		32.7		
Other‡		1.3		
Hispanic ethnicity				
Yes		1.6		
No		98.4		
Education, years				
<12		24.2		
12		33.9		
>12		41.9		
Marital status				
Married		65.9		
Unmarried		34.1		
Birth weight				
LBW (<2500 g)		9.3		
NBW (≥2500 g)		90.7		
In crowded household (>1 person/room)	1,757	10.3	0.9	8.5–12.0

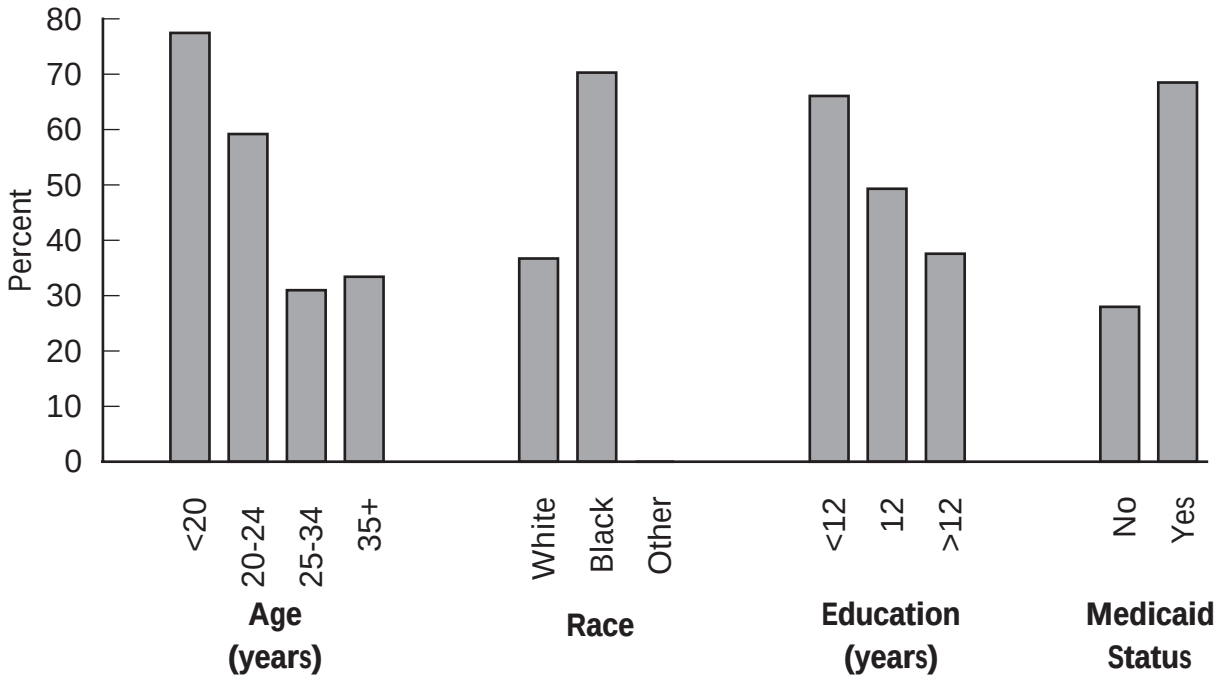
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American and Asian.
Sources: Figures for "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

ALABAMA 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	337	77.5	2.8	72.0–83.1
20–24	480	59.2	2.9	53.5–64.9
25–34	765	31.0	2.2	26.7–35.3
35+	171	33.4	5.0	23.5–43.2
Race				
White	1093	36.7	1.8	33.2–40.2
Black	642	70.3	2.6	65.2–75.3
Other†	16	—	—	—
Education, years				
<12	404	66.1	3.1	60.1–72.2
12	574	49.3	2.7	44.0–54.6
>12	768	37.6	2.3	33.1–42.0
Medicaid recipient				
No	891	28.0	2.0	23.9–32.0
Yes	862	68.5	2.0	64.6–72.5

*Confidence interval. †30 respondents or less, not reported.

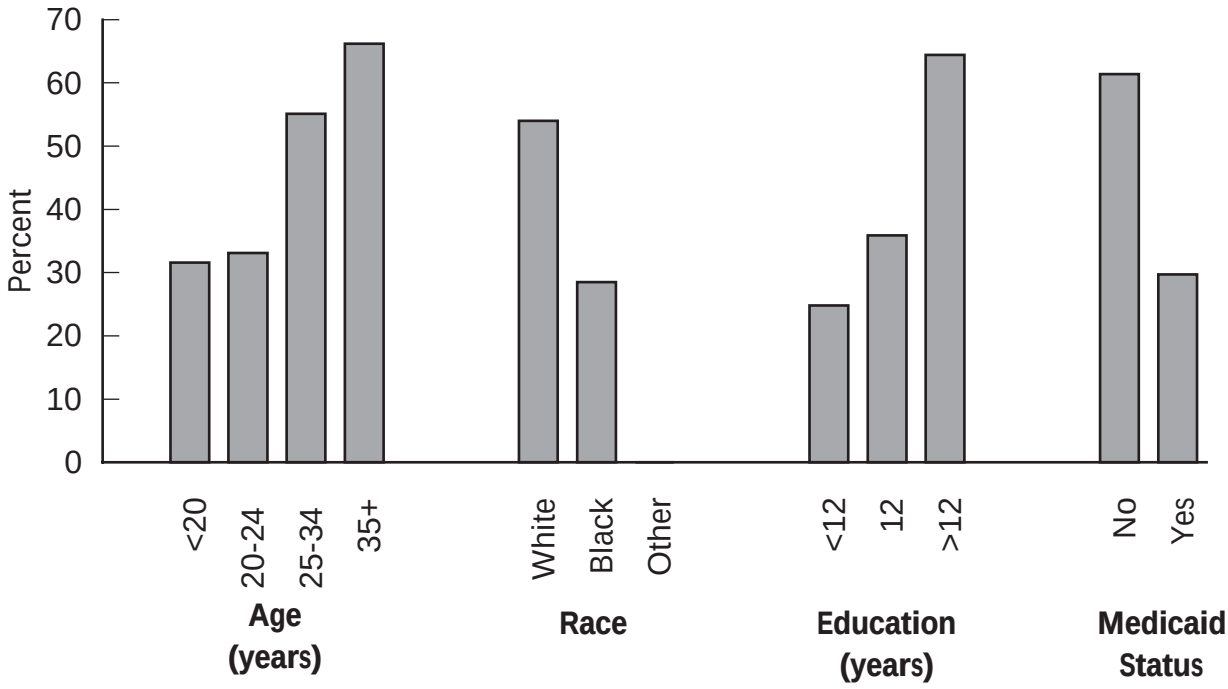


ALABAMA 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	327	31.6	3.3	25.2–38.0
20–24	481	33.1	2.7	27.7–38.5
25–34	778	55.1	2.3	50.5–59.6
35+	169	66.2	4.9	56.7–75.7
Race				
White	1105	54.0	1.8	50.4–57.6
Black	630	28.5	2.5	23.6–33.5
Other†	18	—	—	—
Education, years				
<12	407	24.8	2.8	19.4–30.2
12	577	35.9	2.6	30.9–41.0
>12	764	64.4	2.3	60.0–68.9
Medicaid recipient				
No	880	61.4	2.2	57.1–65.7
Yes	875	29.7	2.0	25.9–33.6

*Confidence interval. †30 respondents or less, not reported.

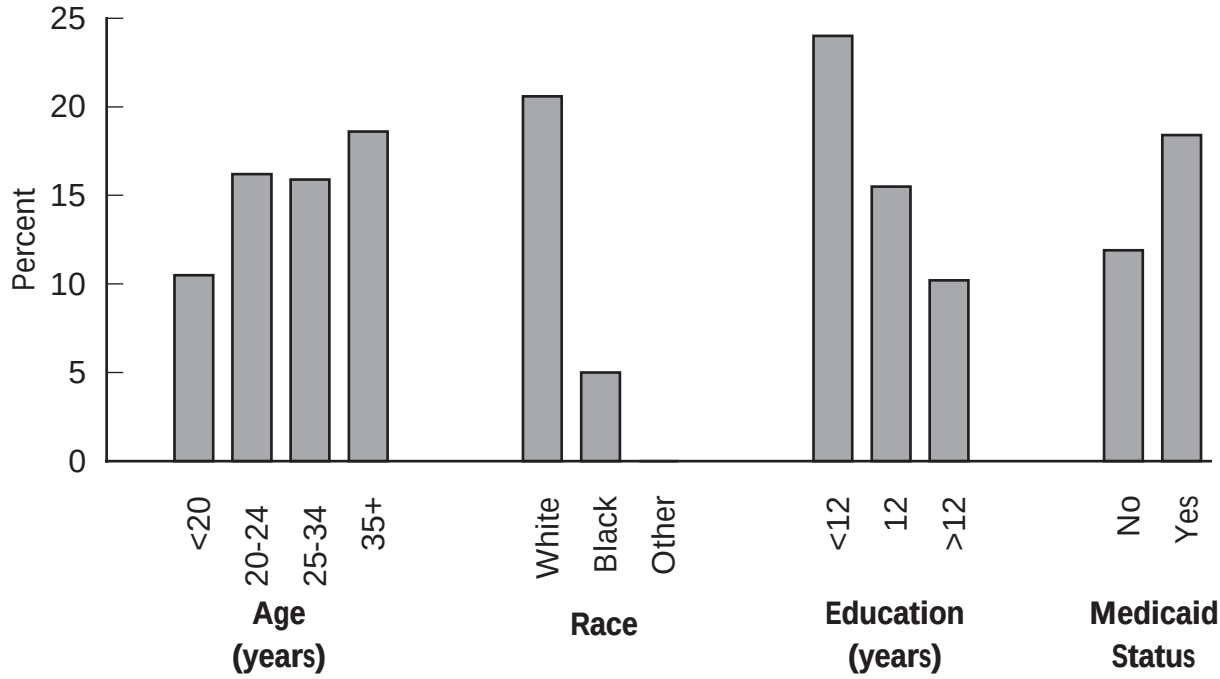


ALABAMA 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	359	10.5	2.0	6.7–14.4
20–24	510	16.2	2.0	12.2–20.2
25–34	815	15.9	1.7	12.7–19.1
35+	180	18.6	4.0	10.7–26.5
Race				
White	1153	20.6	1.4	17.8–23.5
Black	691	5.0	1.2	2.8– 7.3
Other†	18	—	—	—
Education, years				
<12	440	24.0	2.6	18.9–29.1
12	617	15.5	1.8	11.9–19.1
>12	800	10.2	1.4	7.5–12.9
Medicaid recipient				
No	927	11.9	1.4	9.1–14.7
Yes	937	18.4	1.6	15.3–21.5

*Confidence interval. †30 respondents or less, not reported.

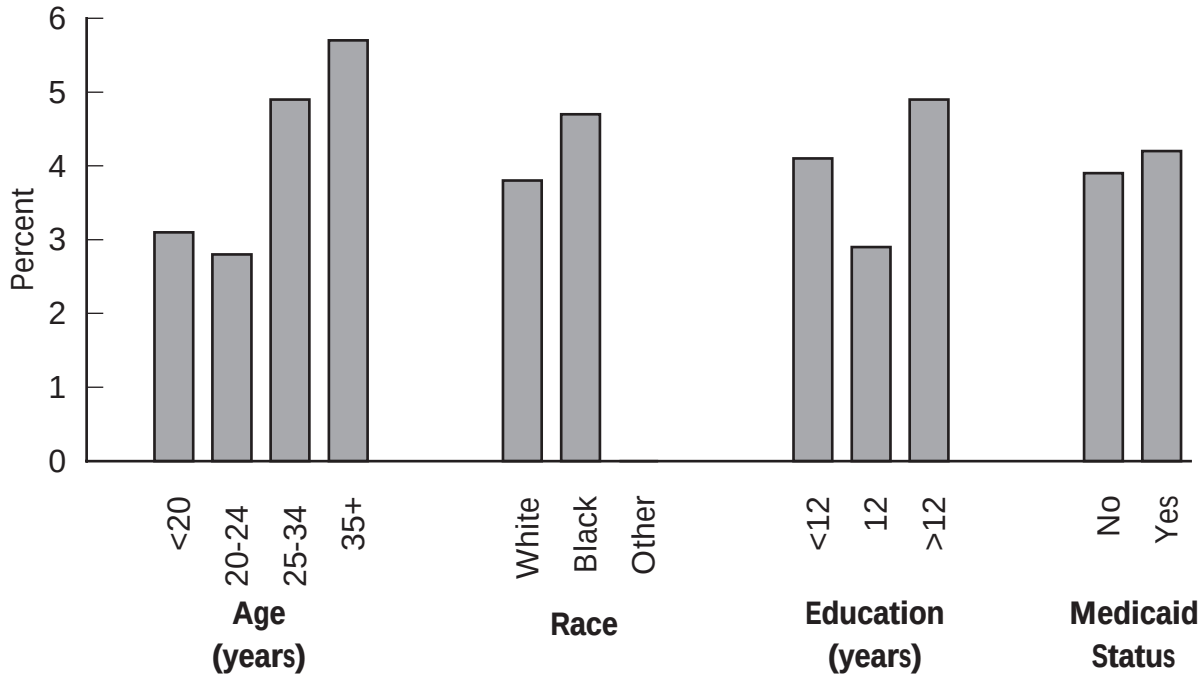


ALABAMA 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	364	3.1	1.2	0.7– 5.4
20–24	513	2.8	0.9	0.9– 4.6
25–34	818	4.9	1.0	3.0– 6.9
35+	178	5.7	2.4	0.9–10.4
Race				
White	1163	3.8	0.7	2.4– 5.2
Black	690	4.7	1.1	2.5– 6.9
Other†	18	—	—	—
Education, years				
<12	446	4.1	1.2	1.6– 6.5
12	618	2.9	0.9	1.2– 4.7
>12	802	4.9	1.0	2.9– 6.8
Medicaid recipient				
No	930	3.9	0.9	2.2– 5.5
Yes	943	4.2	0.8	2.6– 5.9

*Confidence interval. †30 respondents or less, not reported.

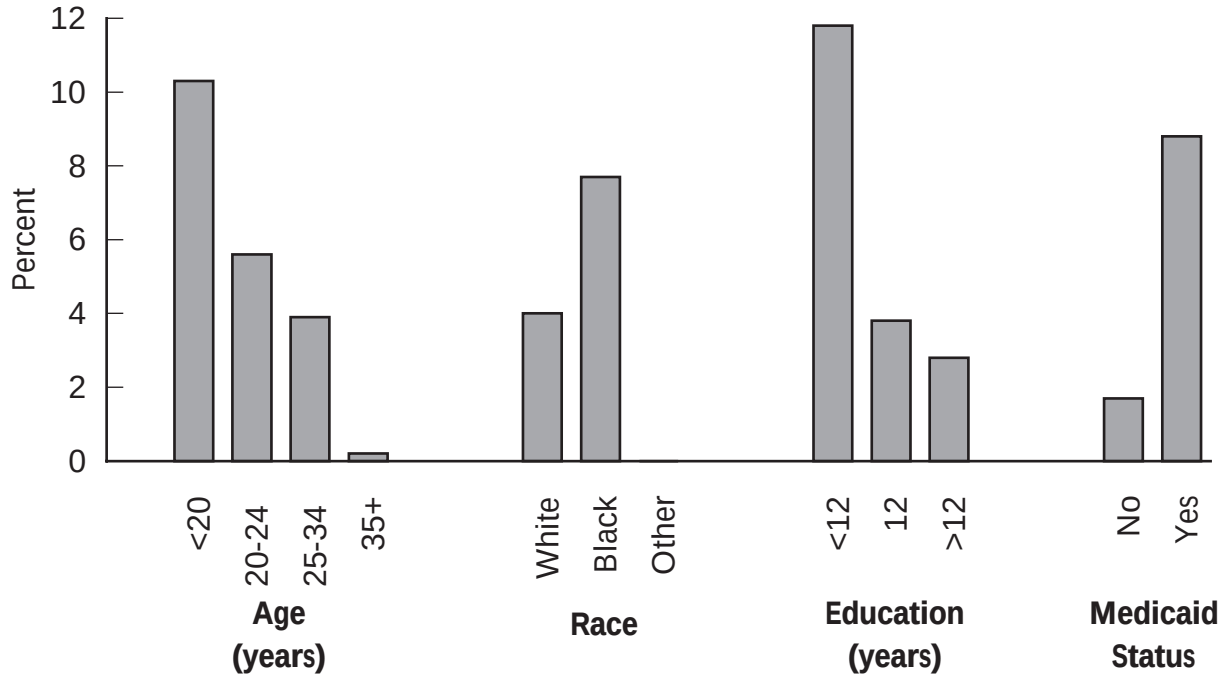


ALABAMA 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	362	10.3	2.2	6.0–14.5
20–24	512	5.6	1.3	3.1– 8.1
25–34	824	3.9	0.9	2.2– 5.6
35+	178	0.2	0.2	0.0– 0.5
Race				
White	1160	4.0	0.7	2.7– 5.4
Black	696	7.7	1.4	4.8–10.5
Other†	18	—	—	—
Education, years				
<12	445	11.8	2.0	7.8–15.8
12	624	3.8	1.0	1.9– 5.6
>12	800	2.8	0.8	1.3– 4.3
Medicaid recipient				
No	935	1.7	0.6	0.6– 2.8
Yes	941	8.8	1.2	6.5–11.2

*Confidence interval. †30 respondents or less, not reported.

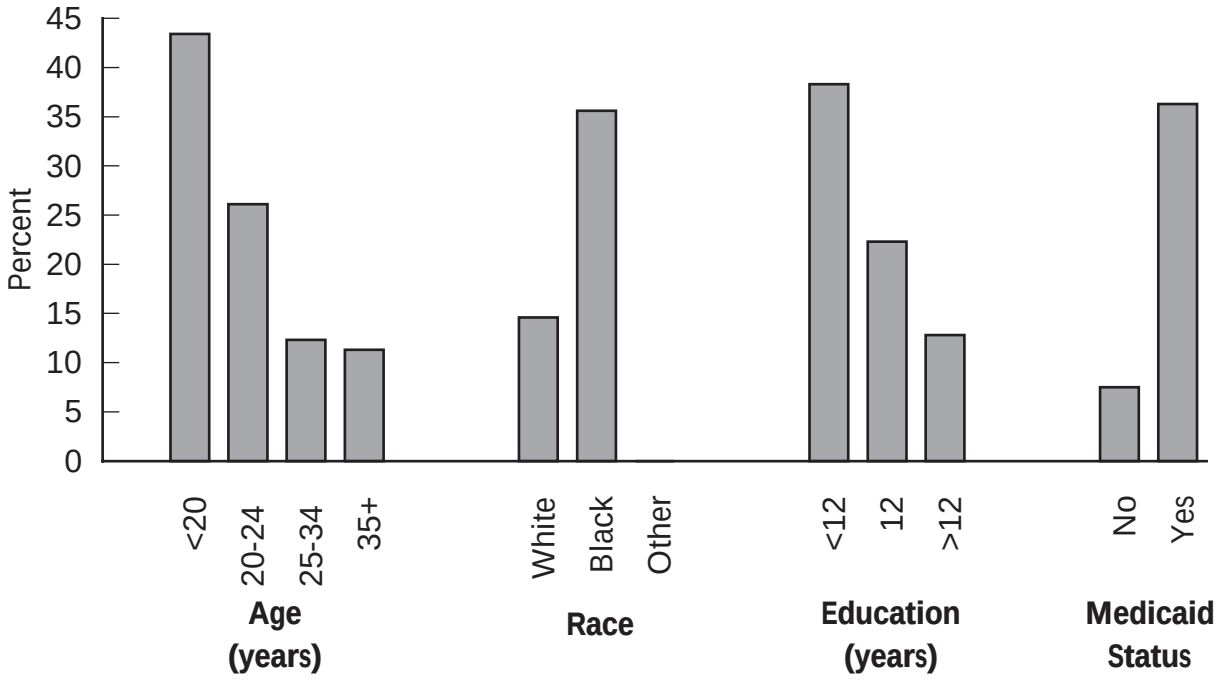


ALABAMA 1996
Prevalence of Entry Into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	356	43.4	3.4	36.8–50.1
20–24	508	26.1	2.5	21.3–31.0
25–34	816	12.3	1.5	9.4–15.2
35+	178	11.3	3.2	5.0–17.6
Race				
White	1162	14.6	1.2	12.2–17.1
Black	676	35.6	2.6	30.6–40.6
Other†	18	—	—	—
Education, years				
<12	437	38.3	3.0	32.4–44.3
12	617	22.3	2.2	18.0–26.6
>12	797	12.8	1.5	9.9–15.8
Medicaid recipient				
No	930	7.5	1.2	5.2– 9.8
Yes	928	36.3	2.0	32.4–40.3

*Confidence interval. †30 respondents or less, not reported.



State Exhibits

ALASKA

PRAMS 1996 Surveillance Report

ALASKA 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		11.1		
20–24		26.5		
25–34		49.1		
35+		13.3		
Race				
White		66.7		
Black		4.4		
Other‡		29.0		
Hispanic ethnicity				
Yes		6.4		
No		93.6		
Education, years				
<12		13.9		
12		42.9		
>12		43.2		
Marital status				
Married		69.0		
Unmarried		31.0		
Birth weight				
LBW (<2500 g)		5.5		
NBW (≥2500 g)		94.5		
Annual household income				
<$15,000	407	26.5	1.3	24.0–29.0
$15,001–$25,000	227	19.4	1.3	16.8–21.9
$25,001–$40,000	242	21.0	1.3	18.4–23.6
>$40,000	385	33.1	1.5	30.2–36.0
In crowded household (>1 person/room)	1,238	22.3	1.2	20.0–24.6

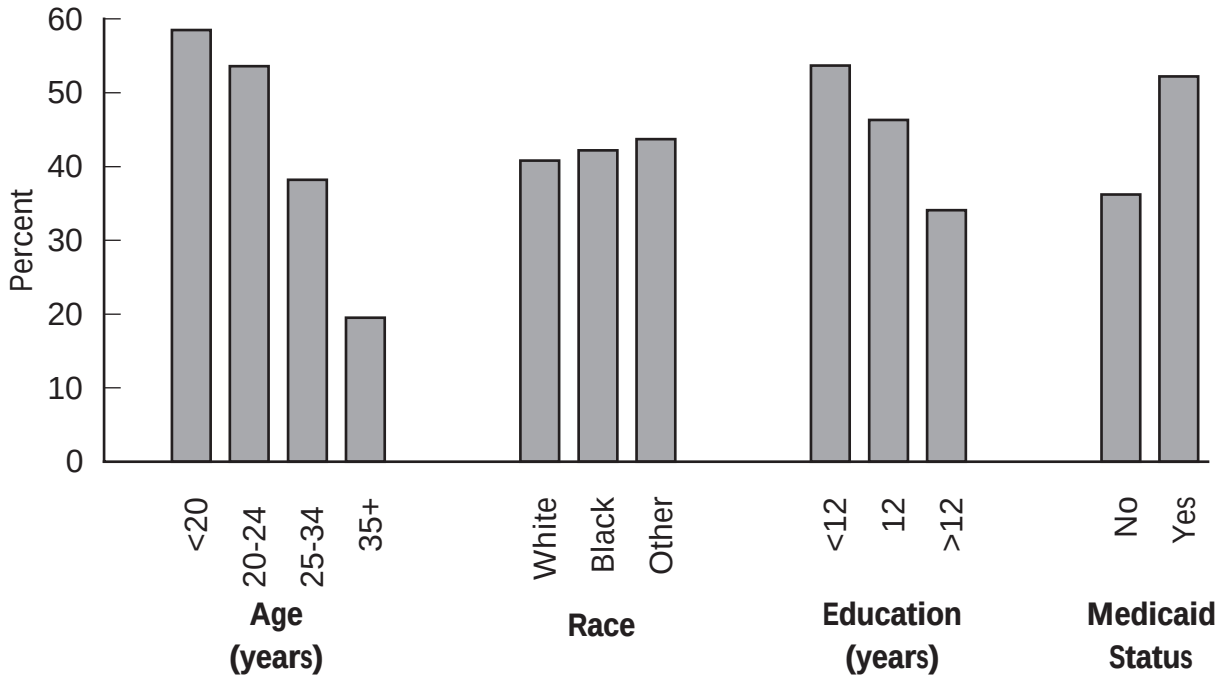
*PRAMS-eligible population is defined as all state residents who gave birth.
†Confidence interval.
‡Other includes Alaska Native (23.9%), Asian (4.9%), and other nonwhite (0.2%).
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

ALASKA 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	134	58.5	5.0	48.6–68.3
20–24	309	53.6	3.3	47.3–60.0
25–34	587	38.2	2.3	33.8–42.6
35+	154	19.5	3.4	12.8–26.3
Race				
White	644	40.8	2.1	36.7–44.9
Black	34	42.2	9.5	23.7–60.8
Other†	502	43.7	2.2	39.3–48.1
Education, years				
<12	161	53.7	4.5	44.9–62.4
12	513	46.3	2.6	41.2–51.3
>12	497	34.1	2.3	29.5–38.6
Medicaid recipient				
No	720	36.2	2.0	32.3–40.1
Yes	464	52.2	2.7	47.0–57.4

*Confidence interval. †Other is predominantly Alaska Native.

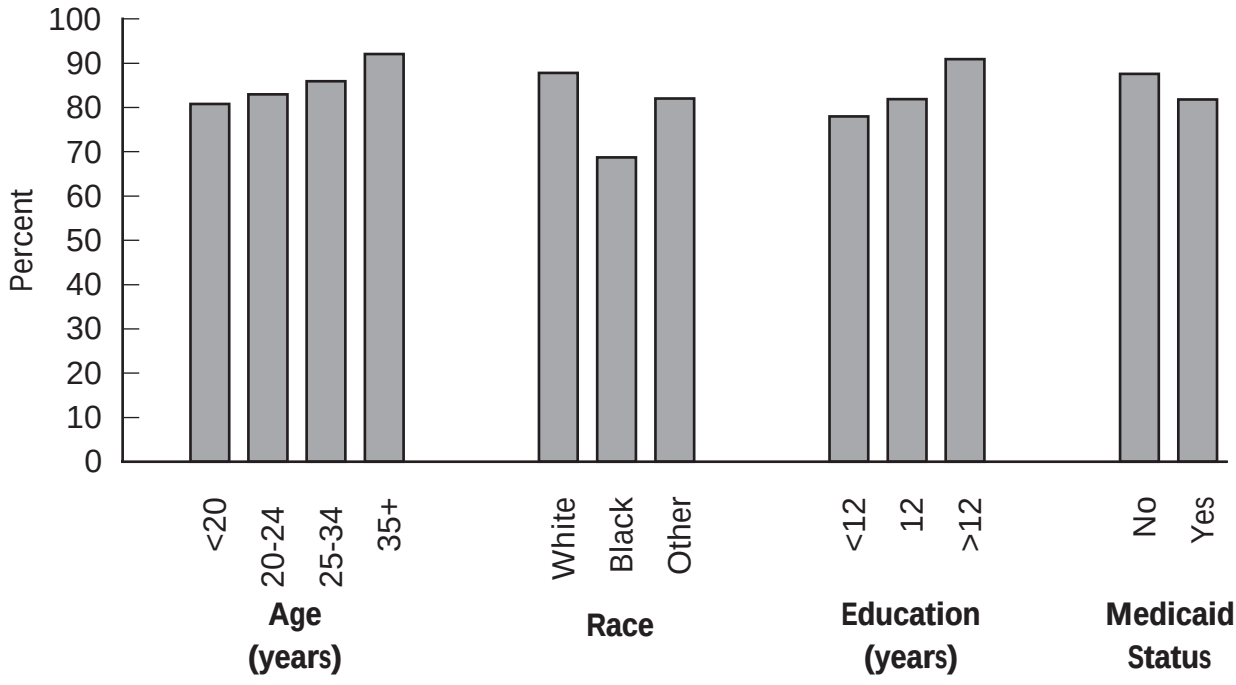


ALASKA 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	138	80.8	3.5	73.8–87.7
20–24	330	83.0	2.4	78.3–87.7
25–34	600	85.9	1.6	82.8–89.0
35+	165	92.1	1.8	88.5–95.6
Race				
White	658	87.8	1.4	85.1–90.5
Black	37	68.7	8.3	52.3–85.0
Other†	535	82.0	1.6	78.8–85.2
Education, years				
<12	170	78.0	3.4	71.3–84.6
12	533	81.9	1.9	78.1–85.7
>12	518	90.9	1.4	88.3–93.6
Medicaid recipient				
No	725	87.6	1.4	84.9–90.3
Yes	508	81.8	1.9	78.1–85.4

*Confidence interval. †Other is predominantly Alaska Native.

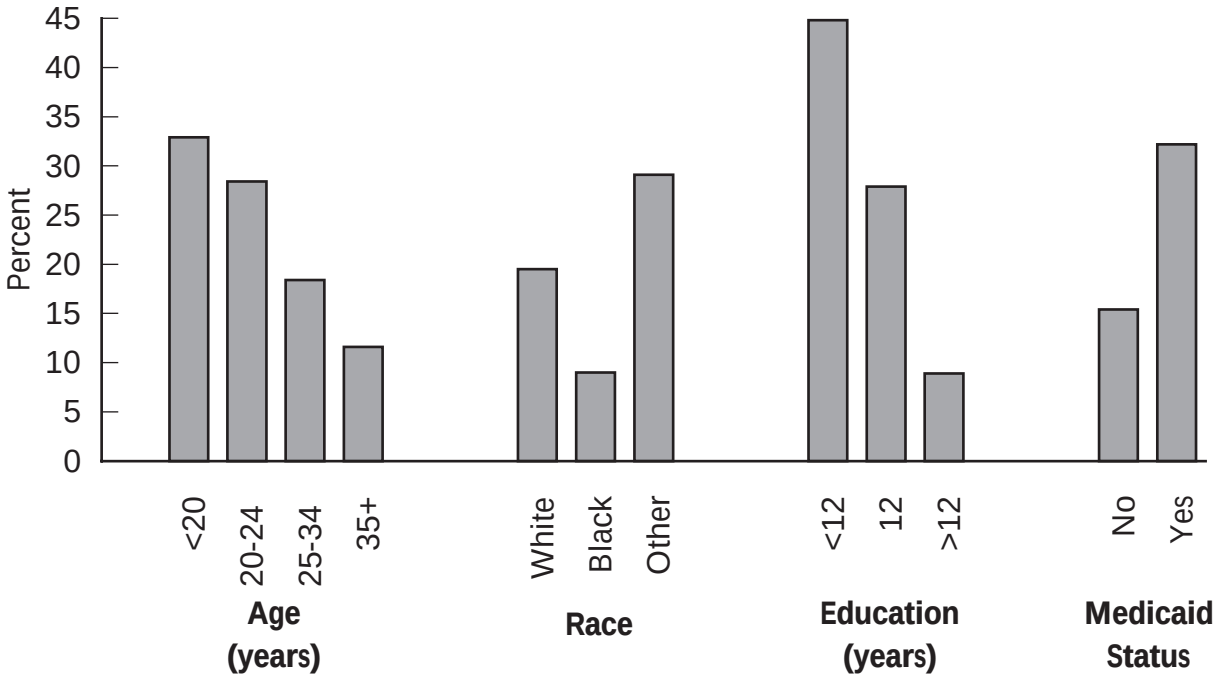


ALASKA 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	147	32.9	4.3	24.4–41.3
20–24	343	28.4	2.8	22.9–34.0
25–34	610	18.4	1.7	15.0–21.8
35+	168	11.6	2.6	6.6–16.7
Race				
White	668	19.5	1.7	16.1–22.8
Black	41	9.0	5.0	0.0–18.8
Other†	555	29.1	1.8	25.5–32.7
Education, years				
<12	182	44.8	4.2	36.6–53.0
12	554	27.9	2.2	23.5–32.2
>12	518	8.9	1.3	6.3–11.5
Medicaid recipient				
No	736	15.4	1.4	12.6–18.2
Yes	532	32.2	2.3	27.6–36.8

*Confidence interval. †Other is predominantly Alaska Native.

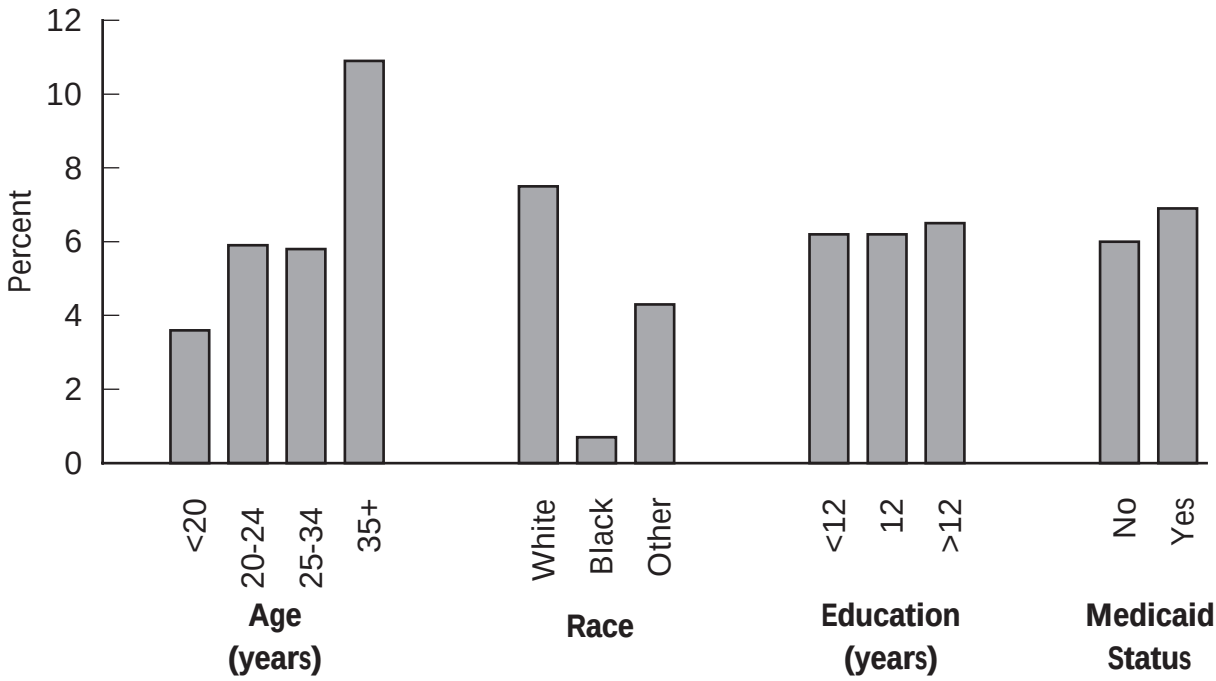


ALASKA 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	144	3.6	1.6	0.5– 6.7
20–24	342	5.9	1.6	2.9– 9.0
25–34	601	5.8	1.1	3.7– 7.9
35+	170	10.9	2.6	5.7–16.1
Race				
White	675	7.5	1.1	5.4– 9.6
Black	41	0.7	0.5	0.0– 1.7
Other†	537	4.3	0.9	2.5– 6.1
Education, years				
<12	178	6.2	2.1	2.1–10.3
12	541	6.2	1.2	3.8– 8.6
>12	525	6.5	1.2	4.2– 8.9
Medicaid recipient				
No	740	6.0	1.0	4.1– 7.9
Yes	517	6.9	1.4	4.2– 9.6

*Confidence interval. †Other is predominantly Alaska Native.

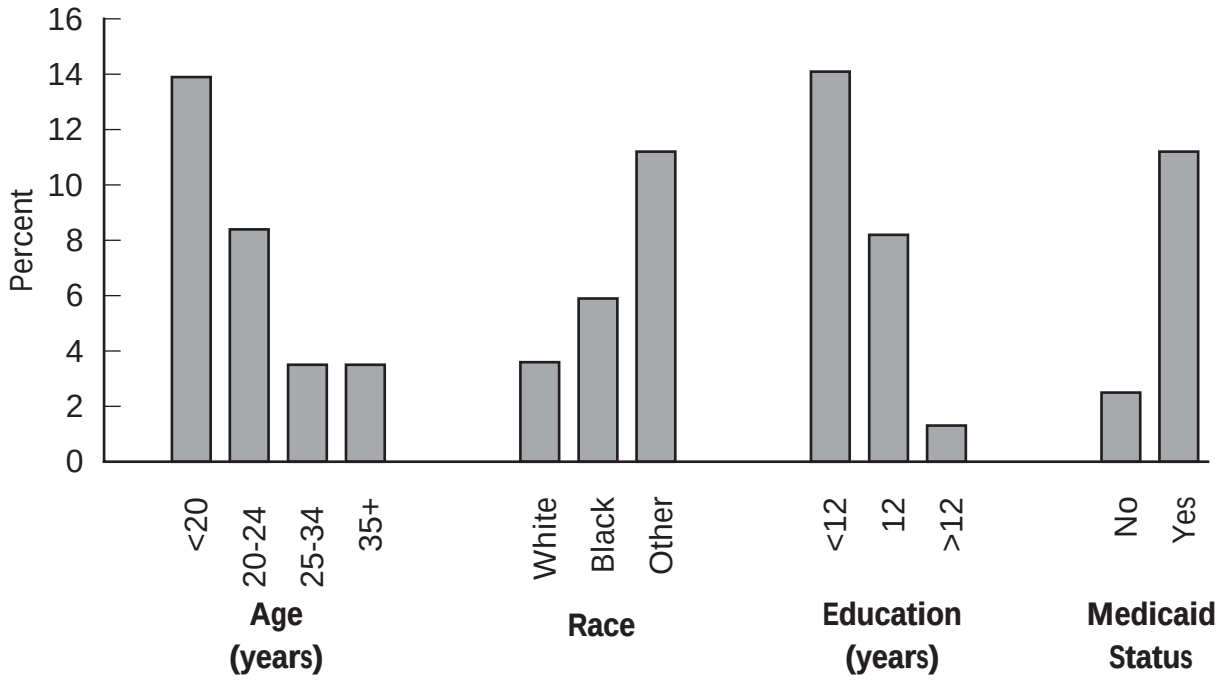


ALASKA 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	109	13.9	3.4	7.2–20.7
20–24	270	8.4	1.7	5.0–11.8
25–34	499	3.5	0.9	1.7– 5.2
35+	144	3.5	1.4	0.8– 6.2
Race				
White	552	3.6	0.9	1.9– 5.3
Black	36	5.9	4.1	0.0–14.0
Other†	430	11.2	1.4	8.4–14.0
Education, years				
<12	138	14.1	2.9	8.5–19.7
12	435	8.2	1.5	5.3–11.1
>12	436	1.3	0.5	0.4– 2.2
Medicaid recipient				
No	597	2.5	0.6	1.2– 3.8
Yes	425	11.2	1.6	8.0–14.4

*Confidence interval. †Other is predominantly Alaska Native.

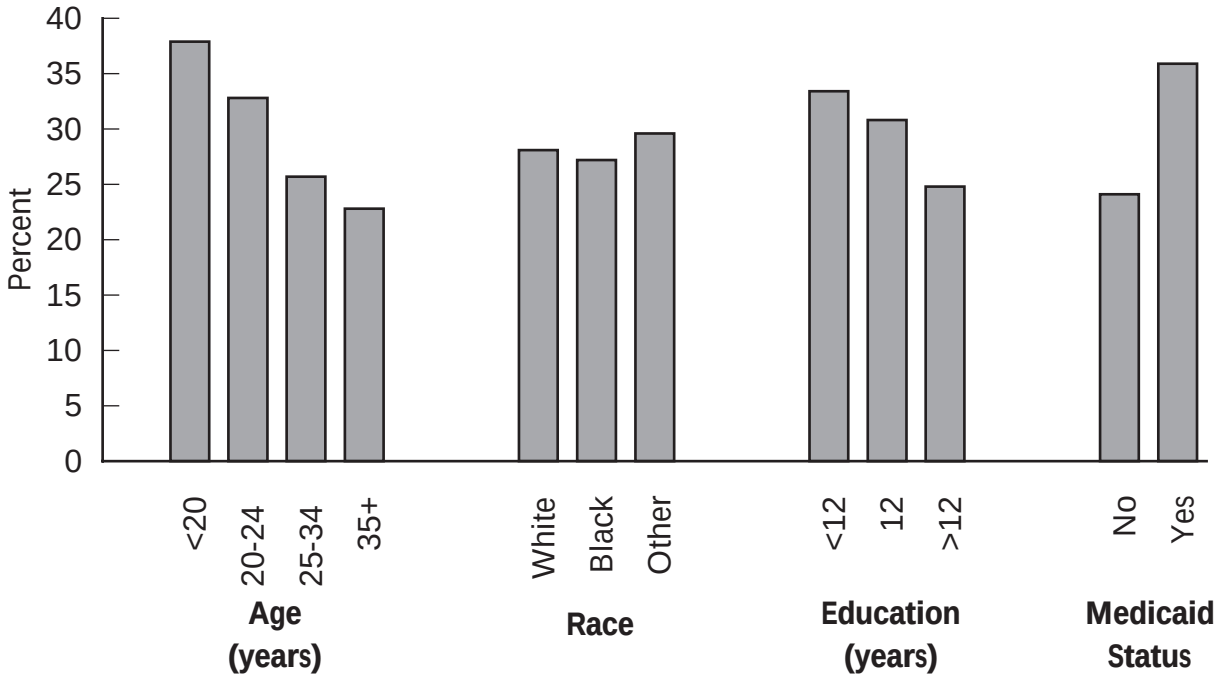


ALASKA 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	156	37.9	4.4	29.3–46.5
20–24	348	32.8	3.0	27.0–38.7
25–34	618	25.7	1.9	21.9–29.5
35+	175	22.8	3.4	16.1–29.5
Race				
White	683	28.1	1.8	24.5–31.7
Black	41	27.2	7.9	11.6–42.7
Other†	569	29.6	1.9	25.8–33.4
Education, years				
<12	188	33.4	3.8	26.0–40.8
12	567	30.8	2.3	26.3–35.3
>12	527	24.8	2.1	20.8–28.8
Medicaid recipient				
No	752	24.1	1.8	20.6–27.5
Yes	545	35.9	2.3	31.3–40.5

*Confidence interval. †Other is predominantly Alaska Native.



State Exhibits

FLORIDA

PRAMS 1996 Surveillance Report

FLORIDA 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		13.3		
20–24		24.3		
25–34		49.6		
35+		12.8		
Race				
White		75.2		
Black		22.3		
Other‡		2.4		
Hispanic ethnicity				
Yes		21.5		
No		78.5		
Education, years				
<12		21.8		
12		35.2		
>12		43.0		
Marital status				
Married		64.5		
Unmarried		35.5		
Birth weight				
LBW (<2500 g)		7.8		
NBW (≥2500 g)		92.2		
Annual household income				
<$15,600	863	41.4	1.5	38.3–44.4
$15,601–$25,200	332	17.6	1.2	15.2–20.0
$25,201–$39,600	271	15.8	1.2	13.5–18.1
>$39,601	402	25.2	1.4	22.5–27.9
In crowded household (>1 person/room)	1,830	12.3	1.0	10.3–14.2

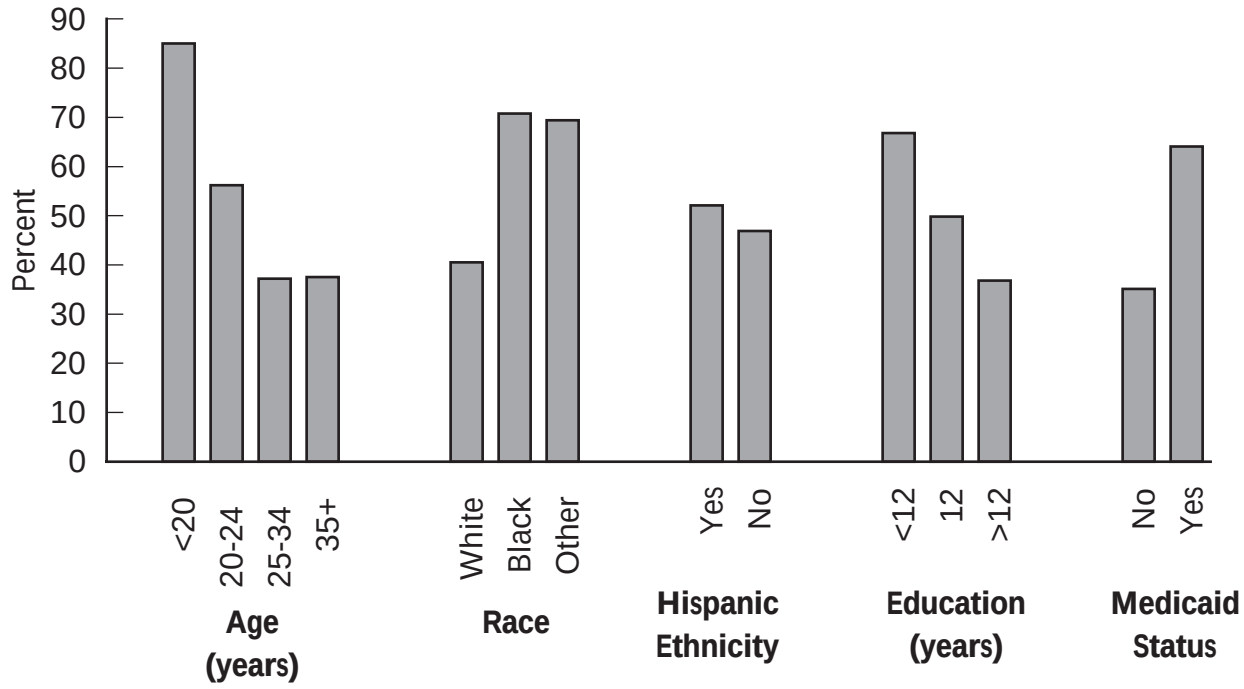
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American, Asian, and other nonwhite.
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

FLORIDA 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	293	85.0	3.0	79.1–90.9
20–24	477	56.2	3.2	49.9–62.5
25–34	856	37.2	2.2	33.0–41.5
35+	225	37.5	4.4	28.9–46.1
Race				
White	1,119	40.5	1.9	36.7–44.3
Black	692	70.8	2.2	66.6–75.1
Other	39	69.4	9.7	50.4–88.3
Ethnicity				
Hispanic	349	52.1	3.7	44.9-59.3
Non-Hispanic	1,502	46.9	1.7	43.5-50.3
Education, years				
<12	438	66.8	3.4	60.2–73.4
12	656	49.8	2.7	44.5–55.1
>12	754	36.8	2.3	32.3–41.2
Medicaid recipient				
No	929	35.1	2.0	31.1–39.1
Yes	922	64.1	2.3	59.6–68.6

*Confidence interval.

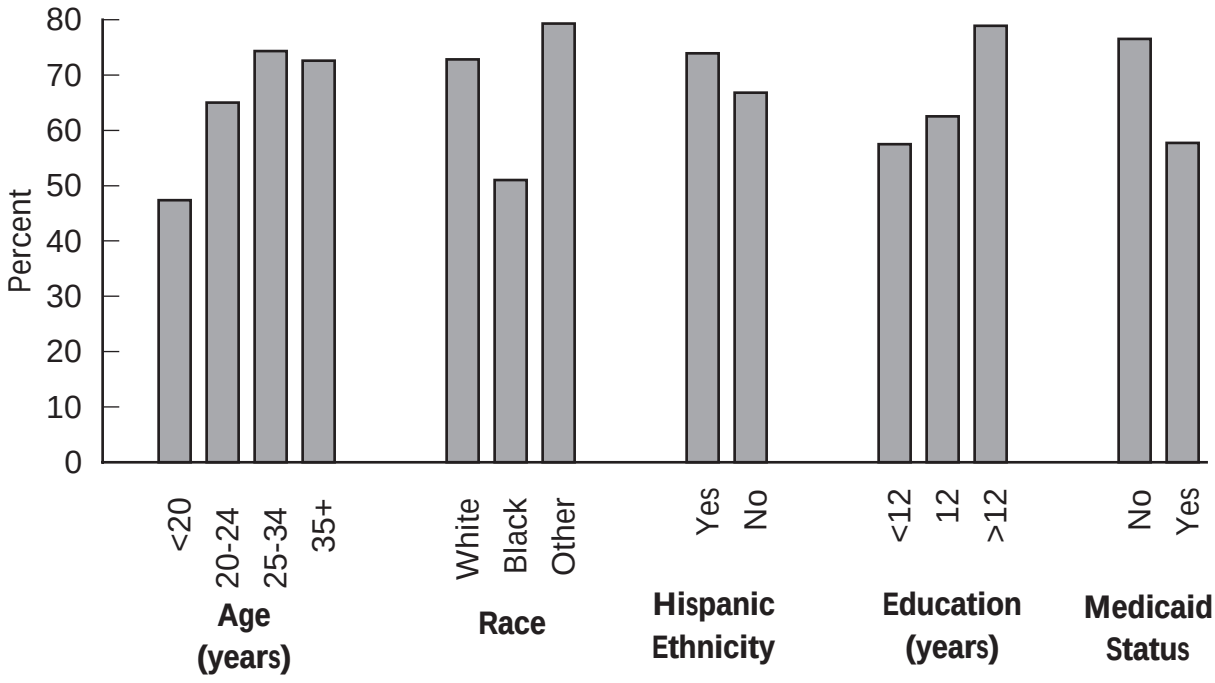


FLORIDA 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	305	47.4	4.0	39.5–55.3
20–24	467	65.0	3.0	59.1–70.8
25–34	854	74.3	1.9	70.5–78.1
35+	227	72.6	3.8	65.1–80.1
Race				
White	1,131	72.8	1.7	69.5–76.2
Black	679	51.0	2.4	46.4–55.7
Other	42	79.3	7.9	63.8–94.9
Ethnicity				
Hispanic	351	73.9	3.1	67.9-79.8
Non-Hispanic	1,502	66.8	1.6	63.7-70.0
Education, years				
<12	439	57.5	3.3	51.1–63.9
12	659	62.5	2.5	57.5–67.5
>12	751	78.9	1.9	75.2–82.6
Medicaid recipient				
No	935	76.5	1.8	73.1–79.9
Yes	918	57.7	2.3	53.2–62.1

*Confidence interval.

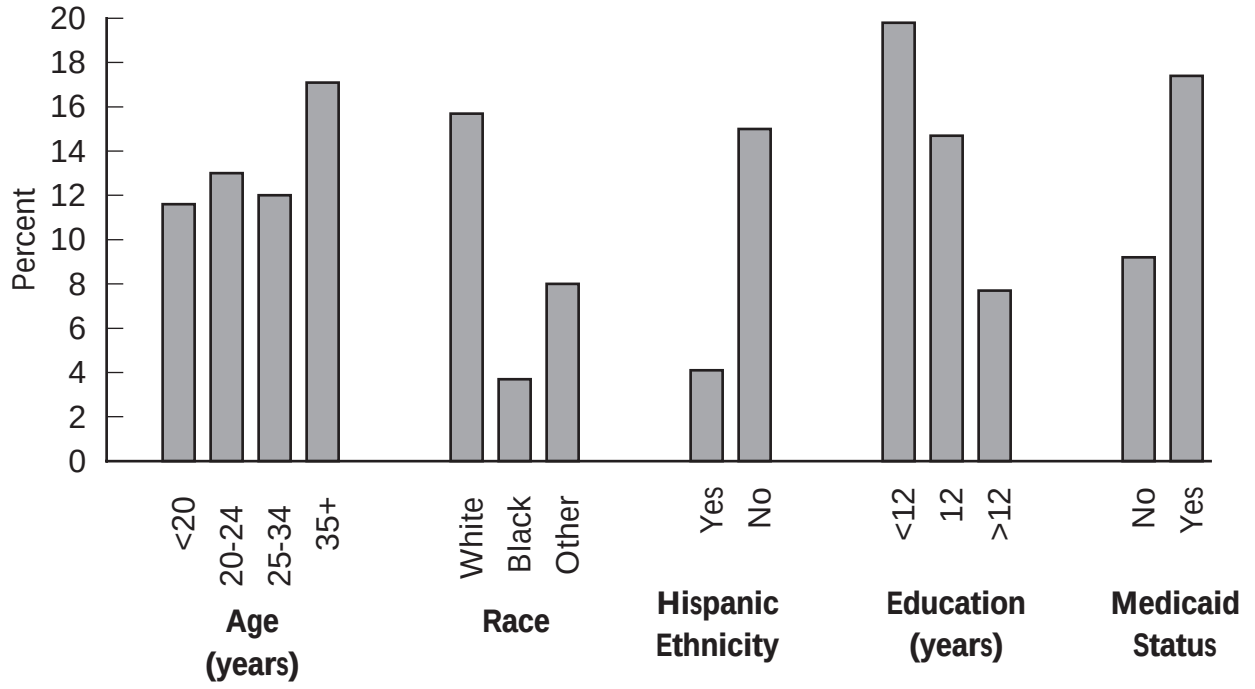


FLORIDA 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	312	11.6	2.7	6.2–16.9
20–24	497	13.0	2.2	8.6–17.4
25–34	903	12.0	1.5	9.1–14.9
35+	237	17.1	3.5	10.4–23.9
Race				
White	1,175	15.7	1.4	13.0–18.5
Black	730	3.7	0.8	2.0– 5.4
Other	43	8.0	5.8	0.0–19.3
Ethnicity				
Hispanic	368	4.1	1.5	1.2– 7.0
Non-Hispanic	1,581	15.0	1.3	12.5–17.5
Education, years				
<12	462	19.8	2.8	14.3–25.3
12	702	14.7	1.9	10.9–18.5
>12	781	7.7	1.3	5.2–10.2
Medicaid recipient				
No	973	9.2	1.2	6.8–11.6
Yes	976	17.4	1.8	13.8–21.0

*Confidence interval.

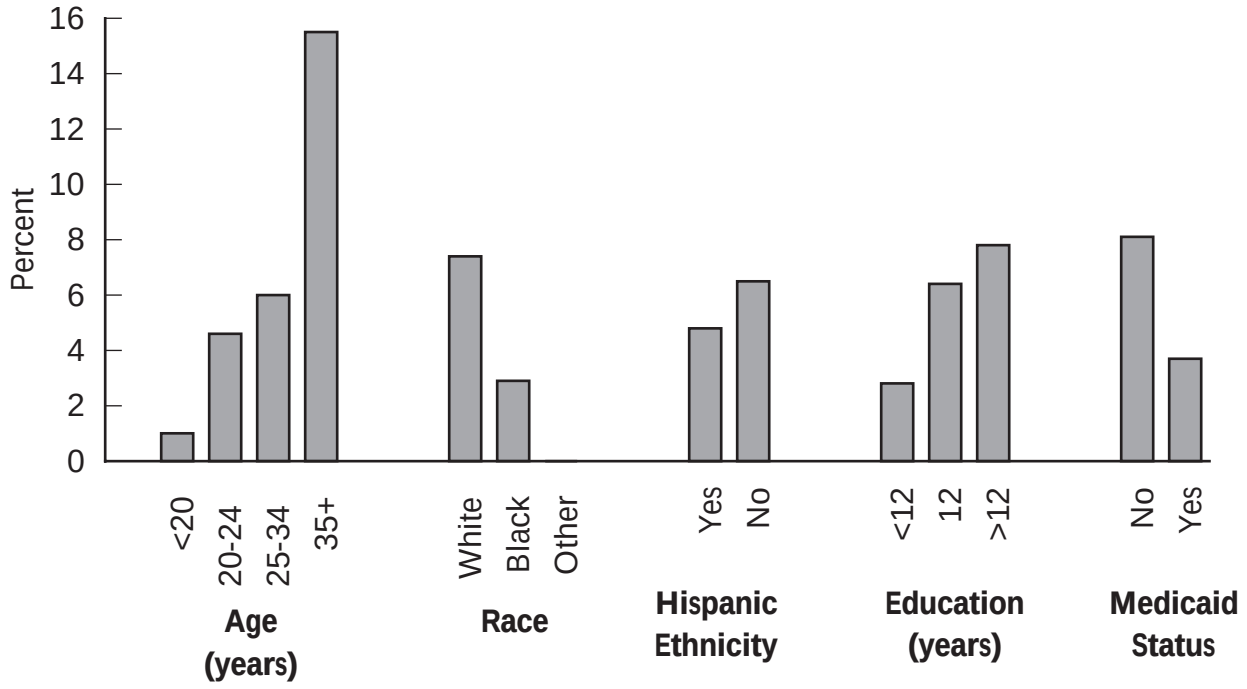


FLORIDA 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	315	1.0	0.8	0.0– 2.6
20–24	491	4.6	1.3	2.0– 7.1
25–34	886	6.0	1.1	3.9– 8.1
35+	240	15.5	3.4	8.9–22.2
Race				
White	1,171	7.4	1.0	5.4– 9.3
Black	718	2.9	0.8	1.3– 4.4
Other	42	0.0	0.0	0.0– 0.0
Ethnicity				
Hispanic	361	4.8	1.5	1.9- 7.8
Non-Hispanic	1,571	6.5	0.9	4.8- 8.3
Education, years				
<12	461	2.8	1.2	0.4– 5.1
12	699	6.4	1.3	3.9– 9.0
>12	768	7.8	1.3	5.2–10.5
Medicaid recipient				
No	964	8.1	1.2	5.8–10.5
Yes	968	3.7	0.9	2.0– 5.5

*Confidence interval.

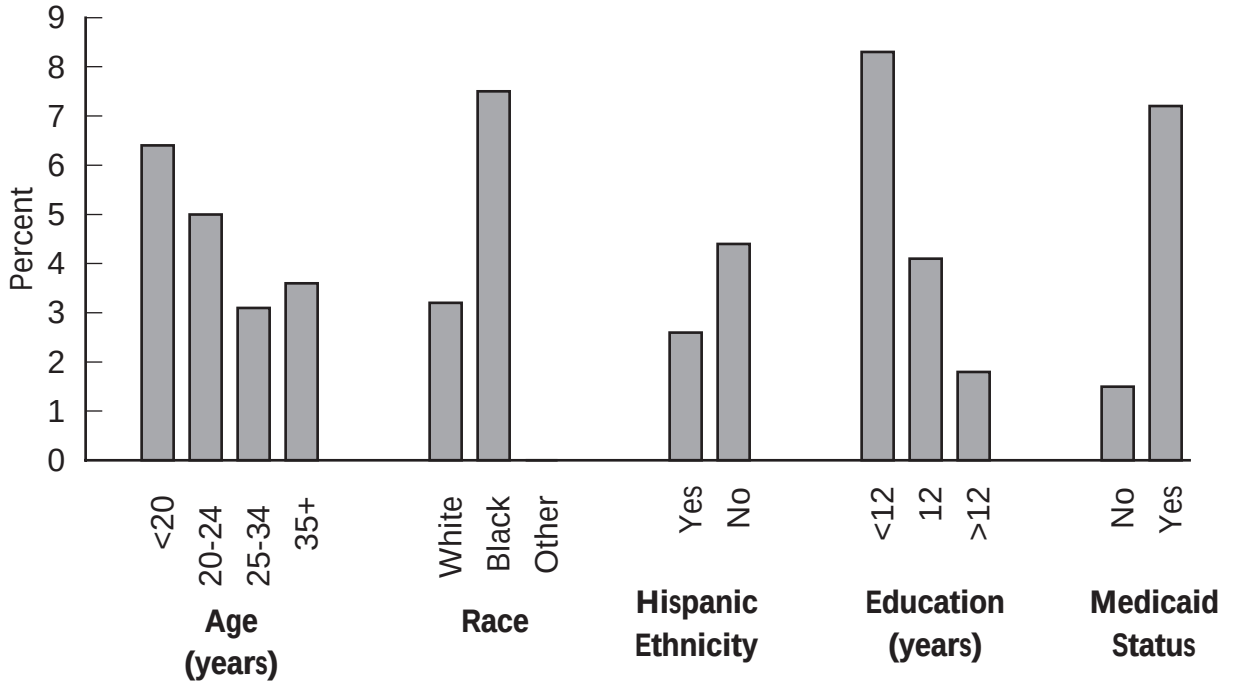


FLORIDA 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	310	6.4	2.0	2.5–10.3
20–24	487	5.0	1.3	2.5– 7.5
25–34	878	3.1	0.8	1.6– 4.7
35+	237	3.6	1.6	0.5– 6.6
Race				
White	1,155	3.2	0.7	1.8– 4.6
Black	714	7.5	1.2	5.1– 9.9
Other	42	0.0	0.0	0.0– 0.0
Ethnicity				
Hispanic	359	2.6	1.1	0.5- 4.8
Non-Hispanic	1,553	4.4	0.7	3.0- 5.8
Education, years				
<12	453	8.3	1.8	4.7–11.9
12	692	4.1	1.0	2.1– 6.1
>12	763	1.8	0.6	0.7– 2.9
Medicaid recipient				
No	950	1.5	0.5	0.6– 2.5
Yes	962	7.2	1.2	4.9– 9.6

*Confidence interval.

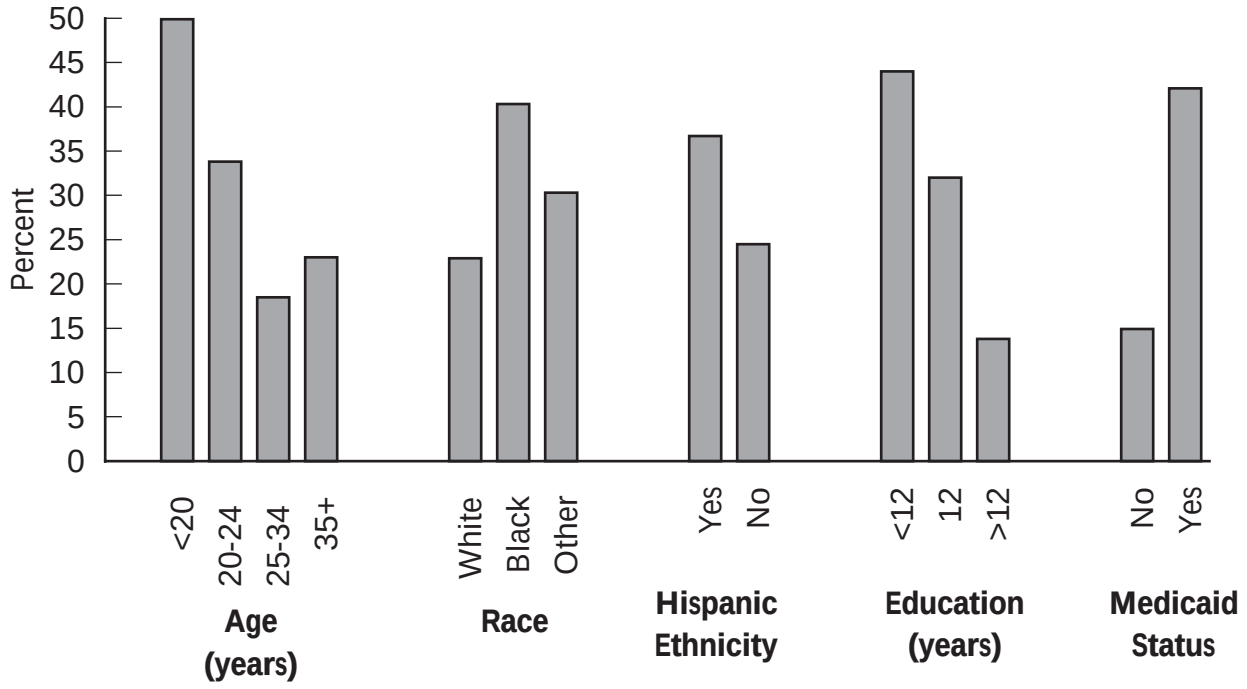


FLORIDA 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	310	49.9	4.1	42.0–57.9
20–24	498	33.8	3.0	27.9–39.7
25–34	892	18.5	1.7	15.1–21.9
35+	237	23.0	3.7	15.7–30.2
Race				
White	1,171	22.9	1.7	19.6–26.1
Black	724	40.3	2.3	35.8–44.8
Other	41	30.3	9.5	11.7–48.9
Ethnicity				
Hispanic	366	36.7	3.5	29.9-43.6
Other	1,571	24.5	1.4	21.7-27.3
Education, years				
<12	462	44.0	3.3	37.4–50.5
12	702	32.0	2.4	27.3–36.7
>12	769	13.8	1.6	10.7–17.0
Medicaid recipient				
No	968	14.9	1.5	12.0–17.8
Yes	969	42.1	2.3	37.6–46.5

*Confidence interval.



State Exhibits

GEORGIA

PRAMS 1996 Surveillance Report

GEORGIA 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		16.0		
20–24		26.5		
25–34		47.3		
35+		10.2		
Race				
White		63.5		
Black		33.9		
Other‡		2.6		
Hispanic ethnicity				
Yes		5.6		
No		94.4		
Education, years				
<12		23.4		
12		34.3		
>12		42.3		
Marital status				
Married		64.7		
Unmarried		35.3		
Birth weight				
LBW (<2500 g)		8.5		
NBW (≥2500 g)		91.5		
Annual household income				
<$15,999	774	40.3	1.6	37.2–43.4
$16,000–$24,999	240	13.9	1.2	11.6–16.2
$25,000–$39,999	230	15.6	1.3	13.1–18.1
>$40,000	393	30.2	1.6	27.1–33.2
In crowded household (>1 person/room)	1,588	11.5	1.1	9.4–13.6

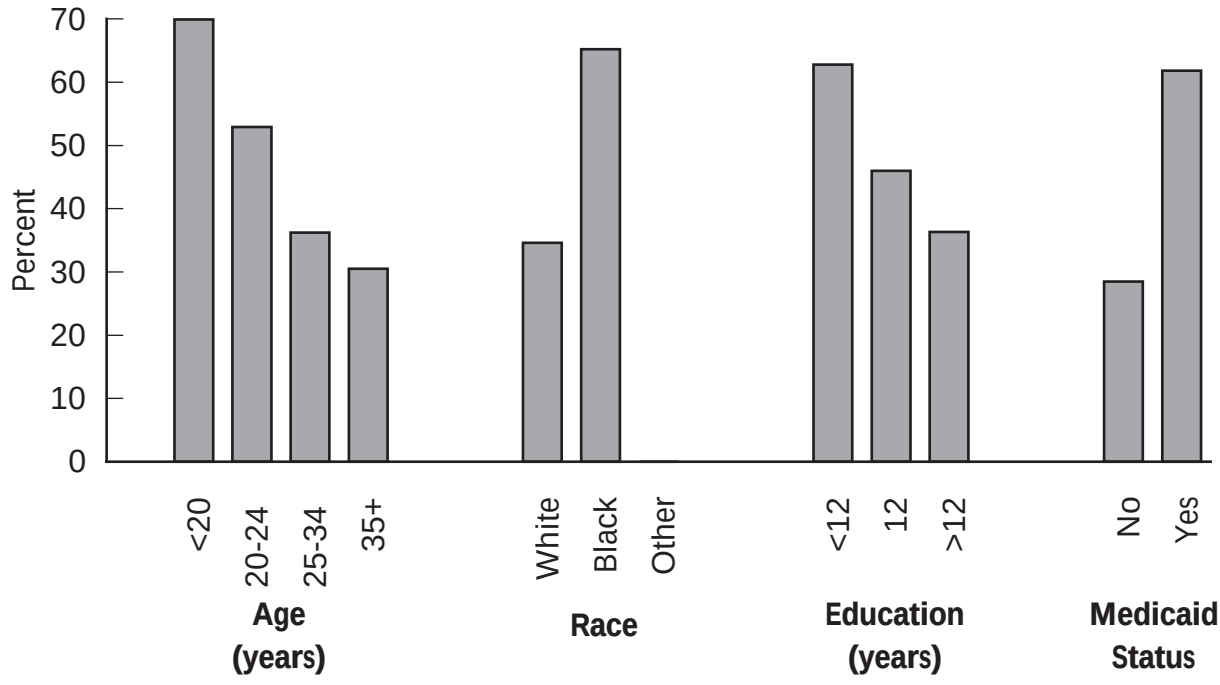
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American, Asian, and other nonwhite.
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

GEORGIA 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	298	69.9	3.9	62.1–77.6
20–24	444	52.9	3.3	46.4–59.5
25–34	743	36.2	2.3	31.7–40.7
35+	134	30.5	5.3	20.0–40.9
Race				
White	766	34.6	2.3	30.2–39.1
Black	824	65.2	2.0	61.2–69.2
Other†	29	—	—	—
Education, years				
<12	361	62.8	3.9	55.1–70.5
12	556	46.0	2.9	40.3–51.6
>12	689	36.3	2.3	31.8–40.8
Medicaid recipient				
No	671	28.5	2.2	24.1–32.8
Yes	948	61.8	2.3	57.3–66.3

*Confidence interval. †30 respondents or less, not reported.

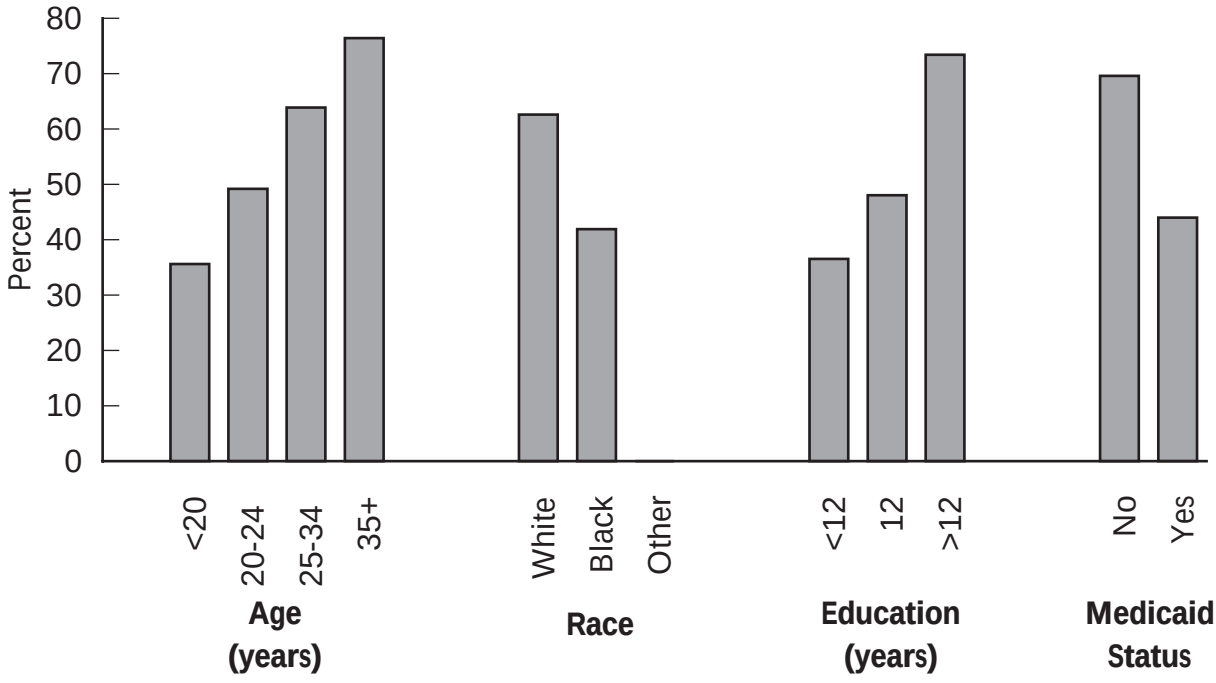


GEORGIA 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	302	35.6	4.0	27.7–43.5
20–24	459	49.2	3.3	42.8–55.6
25–34	735	63.9	2.3	59.3–68.5
35+	137	76.4	4.7	67.1–85.6
Race				
White	778	62.6	2.3	58.1–67.1
Black	827	41.9	2.1	37.9–46.0
Other†	28	—	—	—
Education, years				
<12	367	36.5	3.9	28.9–44.1
12	571	48.0	2.9	42.4–53.6
>12	681	73.4	2.1	69.2–77.6
Medicaid recipient				
No	673	69.6	2.3	65.2–74.1
Yes	960	44.0	2.3	39.5–48.5

*Confidence interval. †30 respondents or less, not reported.

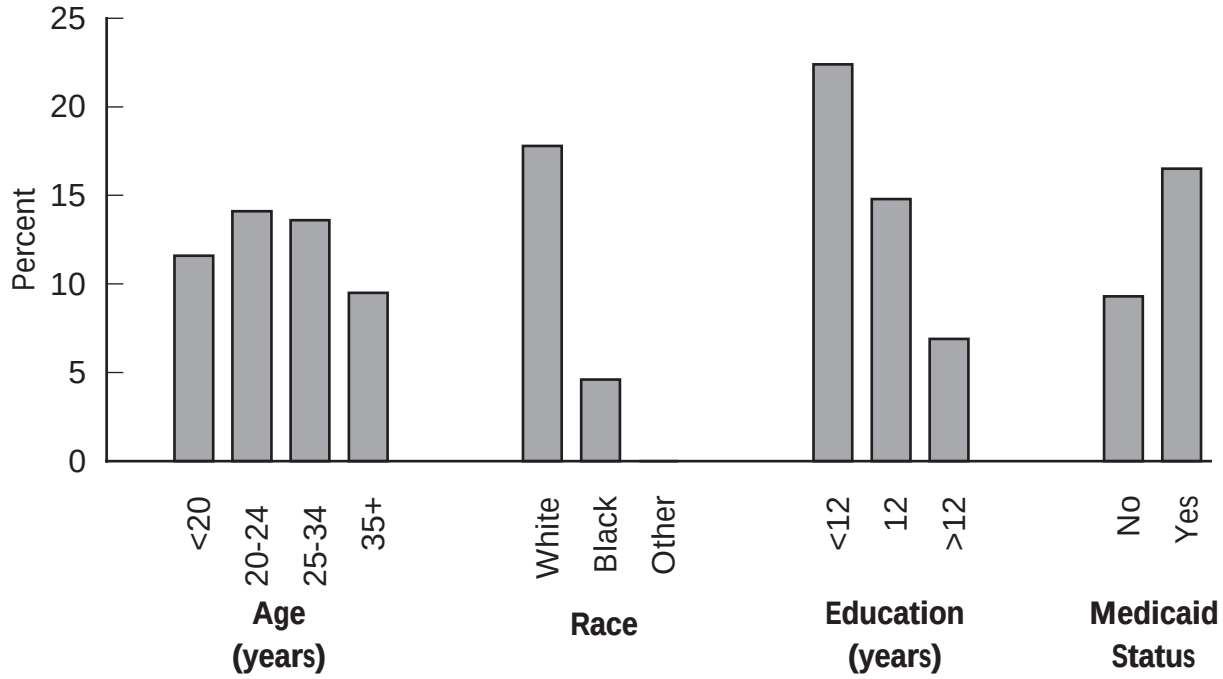


GEORGIA 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	320	11.6	3.0	5.7–17.5
20–24	470	14.1	2.5	9.2–19.0
25–34	747	13.6	1.8	10.2–17.1
35+	147	9.5	3.1	3.4–15.7
Race				
White	786	17.8	1.8	14.2–21.4
Black	868	4.6	0.8	2.9– 6.2
Other†	30	—	—	—
Education, years				
<12	393	22.4	3.4	15.7–29.0
12	581	14.8	2.2	10.6–19.1
>12	696	6.9	1.3	4.4– 9.4
Medicaid recipient				
No	682	9.3	1.5	6.3–12.3
Yes	1,002	16.5	1.8	12.9–20.0

*Confidence interval. †30 respondents or less, not reported.

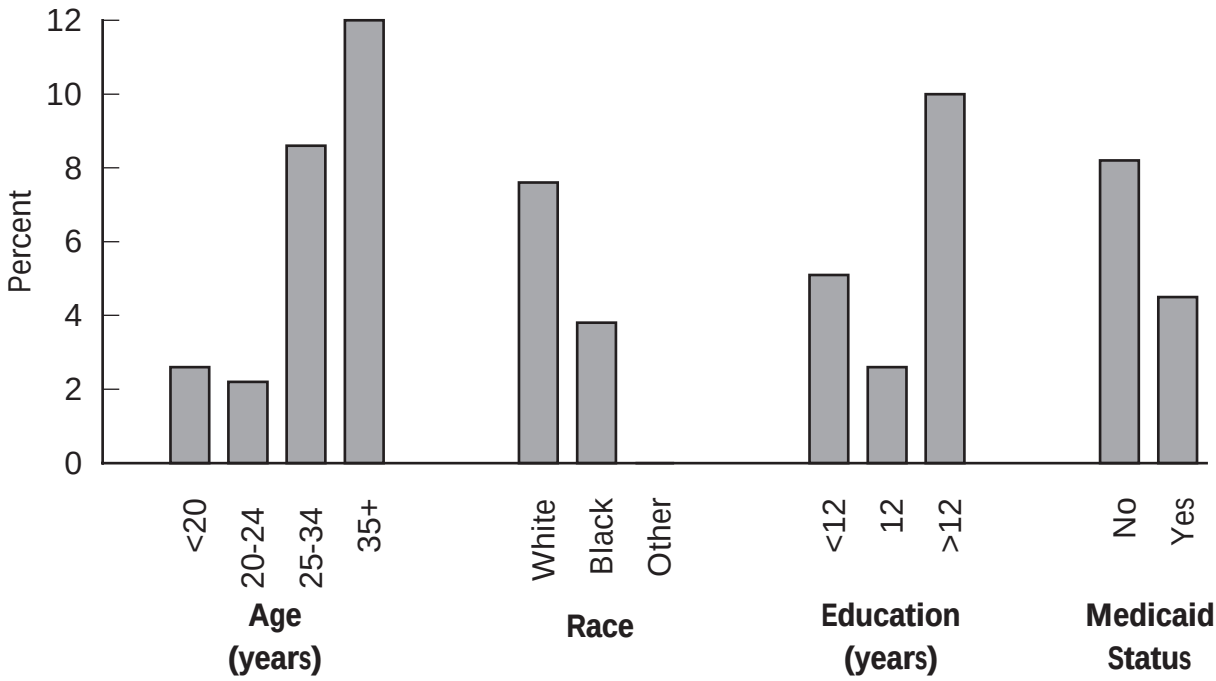


GEORGIA 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	322	2.6	1.3	0.0– 5.2
20–24	464	2.2	1.0	0.2– 4.2
25–34	762	8.6	1.4	5.9–11.3
35+	148	12.0	3.6	4.9–19.1
Race				
White	797	7.6	1.2	5.3–10.0
Black	869	3.8	0.8	2.3– 5.3
Other†	30	—	—	—
Education, years				
<12	394	5.1	1.5	2.0– 8.1
12	588	2.6	0.9	0.8– 4.3
>12	699	10.0	1.6	6.9–13.1
Medicaid recipient				
No	688	8.2	1.4	5.4–11.0
Yes	1,008	4.5	0.9	2.8– 6.3

*Confidence interval. †30 respondents or less, not reported.

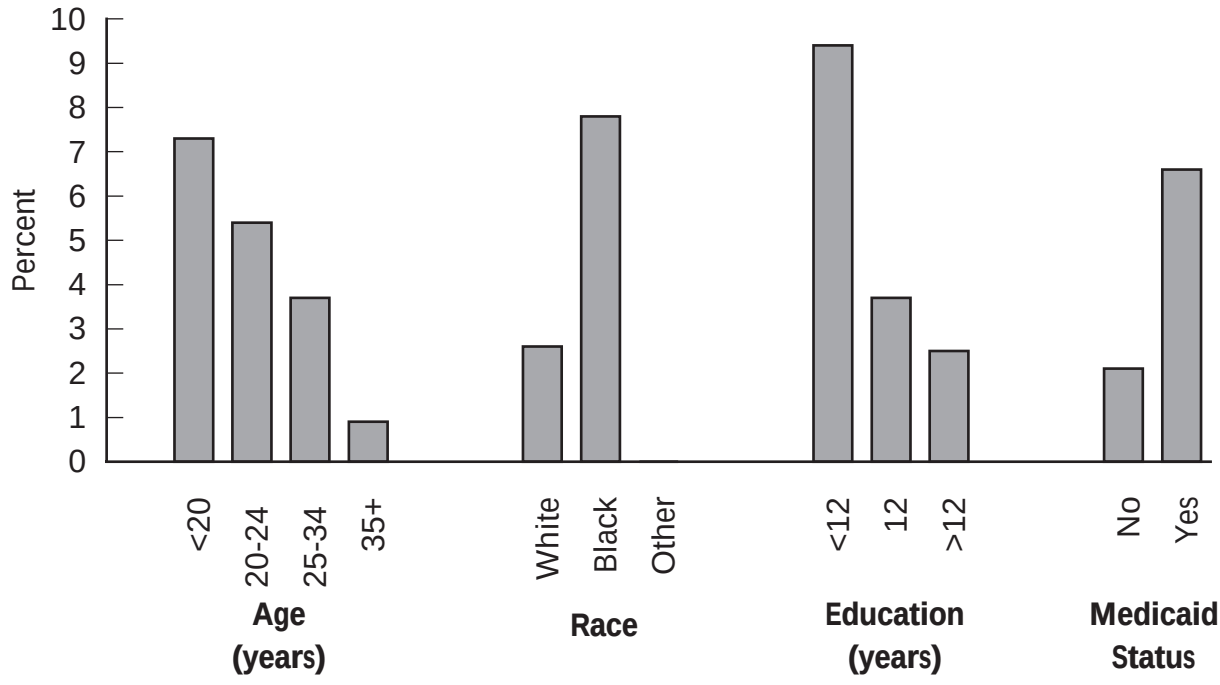


GEORGIA 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	305	7.3	2.3	2.8–11.9
20–24	449	5.4	1.3	2.8– 7.9
25–34	740	3.7	0.8	2.1– 5.3
35+	143	0.9	0.7	0.0– 2.3
Race				
White	766	2.6	0.8	1.1– 4.2
Black	842	7.8	1.1	5.6–10.1
Other†	29	—	—	—
Education, years				
<12	382	9.4	2.1	5.2–13.6
12	567	3.7	0.9	1.9– 5.6
>12	673	2.5	0.7	1.2– 3.8
Medicaid recipient				
No	663	2.1	0.8	0.7– 3.6
Yes	974	6.6	1.0	4.5– 8.6

*Confidence interval. †30 respondents or less, not reported.

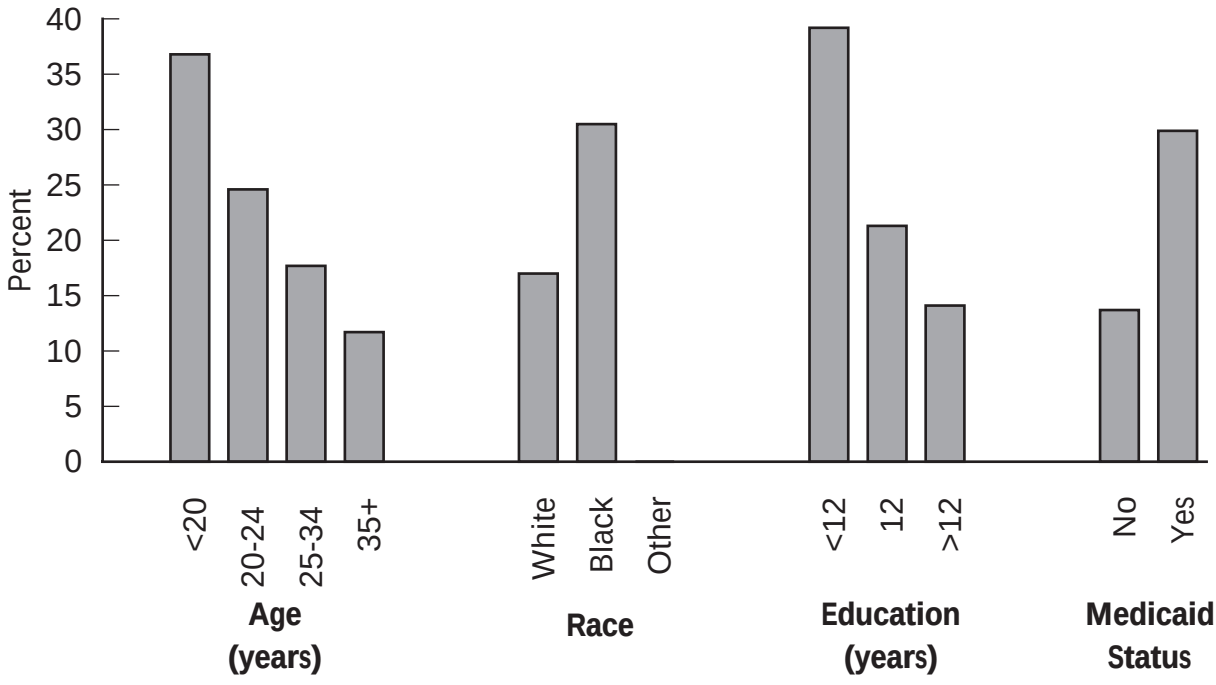


GEORGIA 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	323	36.8	3.9	29.1–44.4
20–24	471	24.6	2.7	19.3–29.9
25–34	762	17.7	1.8	14.1–21.3
35+	150	11.7	3.5	5.0–18.5
Race				
White	801	17.0	1.8	13.4–20.5
Black	877	30.5	1.9	26.8–34.2
Other†	28	—	—	—
Education, years				
<12	403	39.2	3.7	32.0–46.4
12	586	21.3	2.2	17.0–25.7
>12	703	14.1	1.6	10.9–17.3
Medicaid recipient				
No	688	13.7	1.7	10.3–17.1
Yes	1,018	29.9	2.0	25.9–33.8

*Confidence interval. †30 respondents or less, not reported.



State Exhibits

MAINE

PRAMS 1996 Surveillance Report

MAINE 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		9.8		
20–24		24.7		
25–34		54.0		
35+		11.4		
Race				
White		97.7		
Black		0.6		
Other‡		1.7		
Hispanic ethnicity				
Yes		0.8		
No		99.2		
Education, years				
<12		11.9		
12		39.5		
>12		48.7		
Marital status				
Married		70.9		
Unmarried		29.1		
Birth weight				
LBW (<2500 g)		5.9		
NBW (≥2500 g)		94.1		
Annual household income				
<$15,999	354	30.7	1.6	27.6–33.8
$16,000–$24,999	169	15.8	1.2	13.4–18.2
$25,000–$39,999	265	23.5	1.4	20.7–26.2
>$40,000	336	30.1	1.5	27.1–33.0
In crowded household (>1 person/room)	1,151	5.2	0.7	3.8–6.7

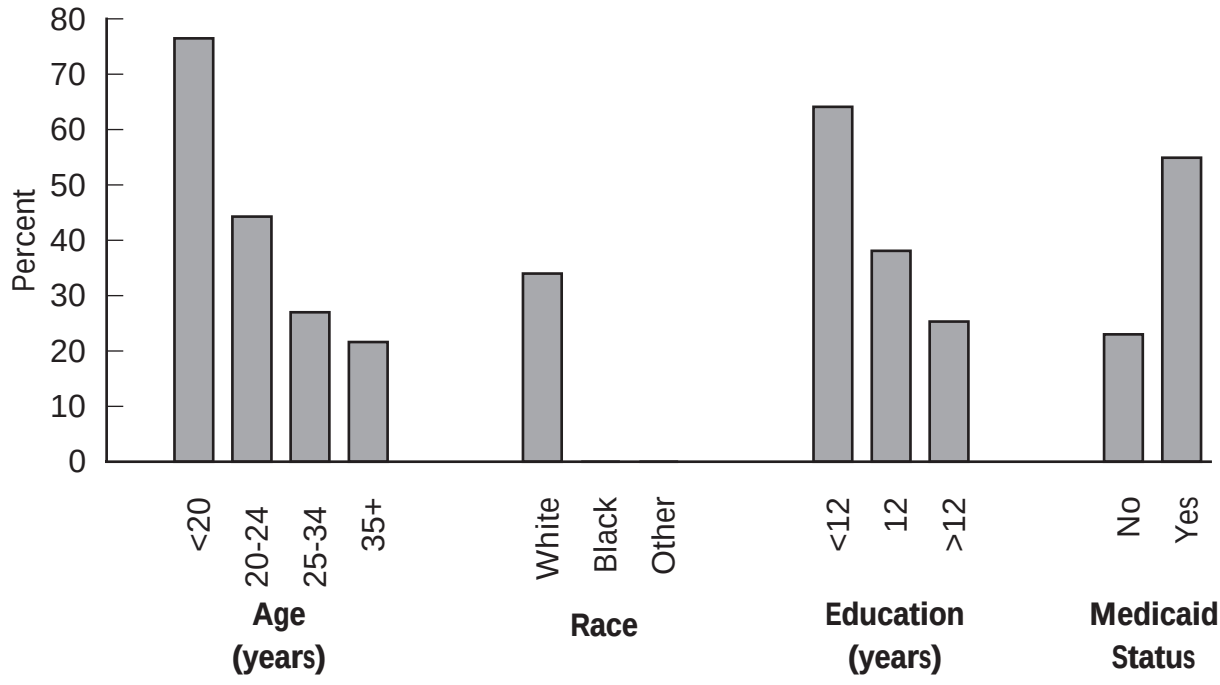
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American and Asian.
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

MAINE 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	82	76.5	5.5	65.8–87.2
20–24	250	44.3	3.6	37.4–51.3
25–34	634	27.0	2.0	23.1–30.9
35+	131	21.6	4.1	13.5–29.6
Race				
White	1,075	34.0	1.6	30.7–37.2
Black†	9	—	—	—
Other†	12	—	—	—
Education, years				
<12	107	64.1	5.4	53.6–74.6
12	412	38.1	2.8	32.7–43.5
>12	575	25.3	2.0	21.4–29.2
Medicaid recipient				
No	713	23.0	1.7	19.6–26.5
Yes	384	54.9	3.0	49.1–60.7

*Confidence interval. †30 respondents or less, not reported.

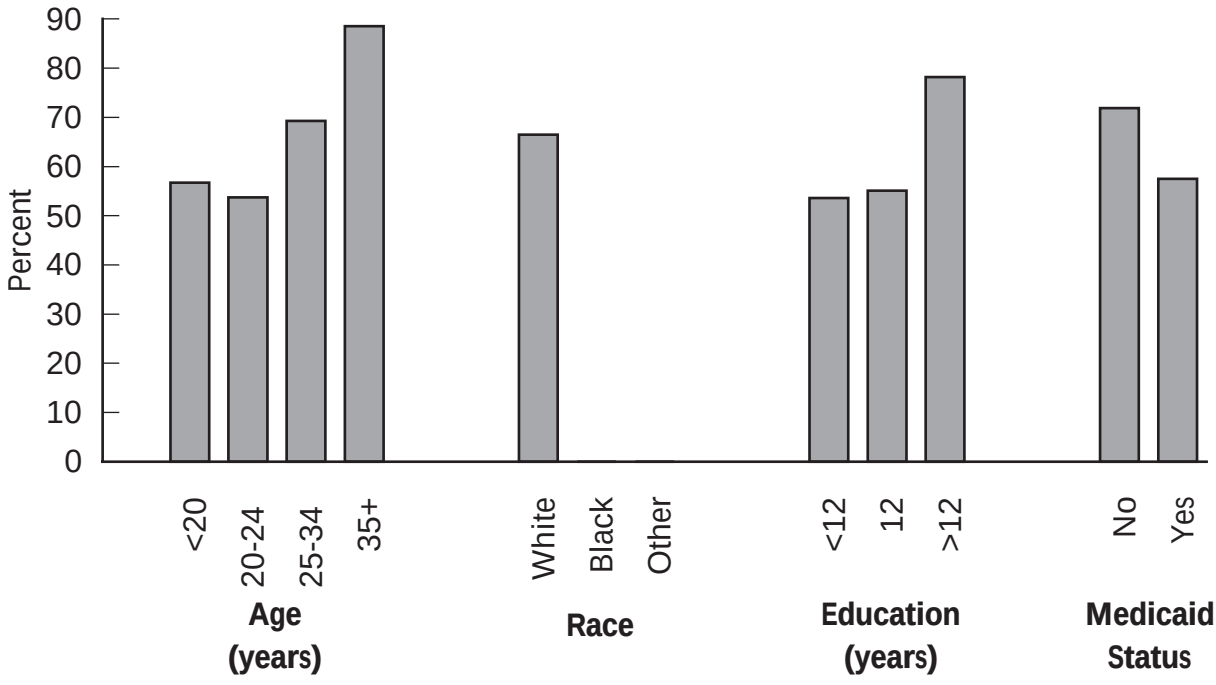


MAINE 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	92	56.7	6.0	44.9–68.5
20–24	257	53.7	3.5	46.9–60.5
25–34	642	69.3	2.0	65.3–73.2
35+	142	88.5	3.0	82.6–94.4
Race				
White	1,110	66.5	1.6	63.4–69.6
Black†	9	—	—	—
Other†	13	—	—	—
Education, years				
<12	114	53.6	5.3	43.2–64.0
12	434	55.1	2.7	49.8–60.5
>12	582	78.2	1.9	74.6–81.9
Medicaid recipient				
No	716	71.9	1.9	68.3–75.6
Yes	417	57.5	2.8	52.1–63.0

*Confidence interval. †30 respondents or less, not reported.

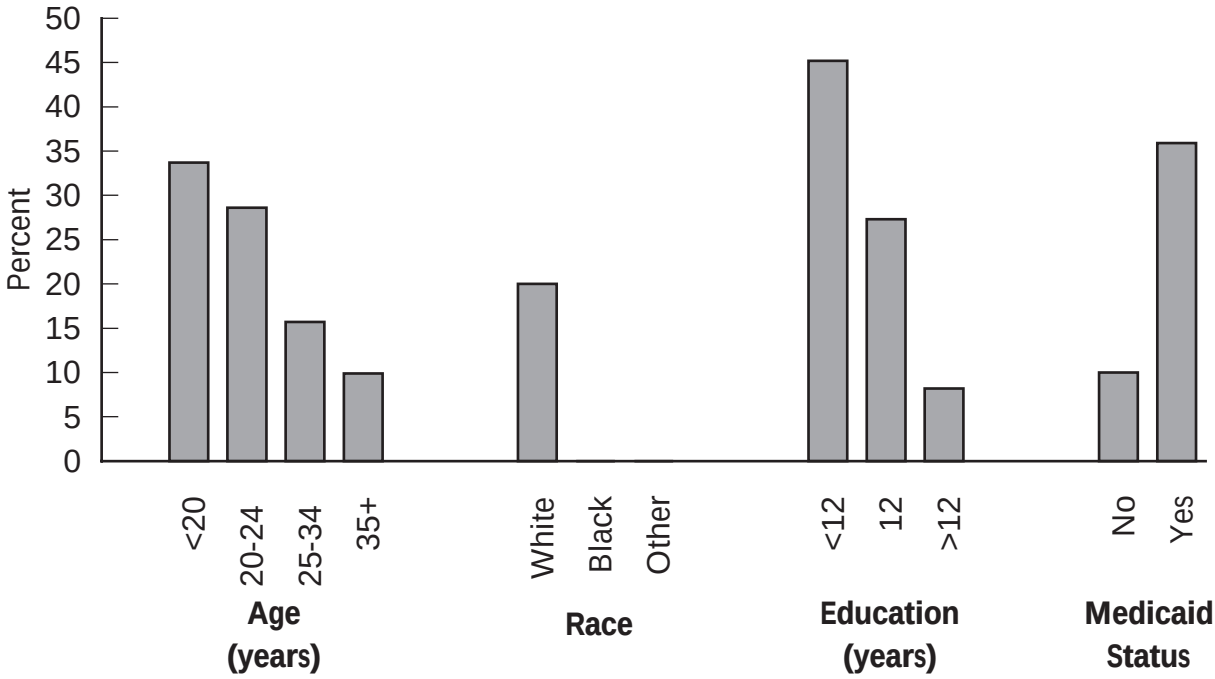


MAINE 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	99	33.7	5.6	22.8–44.7
20–24	267	28.6	3.2	22.4–34.9
25–34	666	15.7	1.6	12.6–18.9
35+	146	9.9	2.8	4.5–15.3
Race				
White	1,153	20.0	1.4	17.3–22.6
Black†	10	—	—	—
Other†	15	—	—	—
Education, years				
<12	121	45.2	5.2	35.0–55.5
12	453	27.3	2.4	22.5–32.1
>12	601	8.2	1.2	5.8–10.6
Medicaid recipient				
No	745	10.0	1.2	7.6–12.4
Yes	433	35.9	2.7	30.7–41.2

*Confidence interval. †30 respondents or less, not reported.

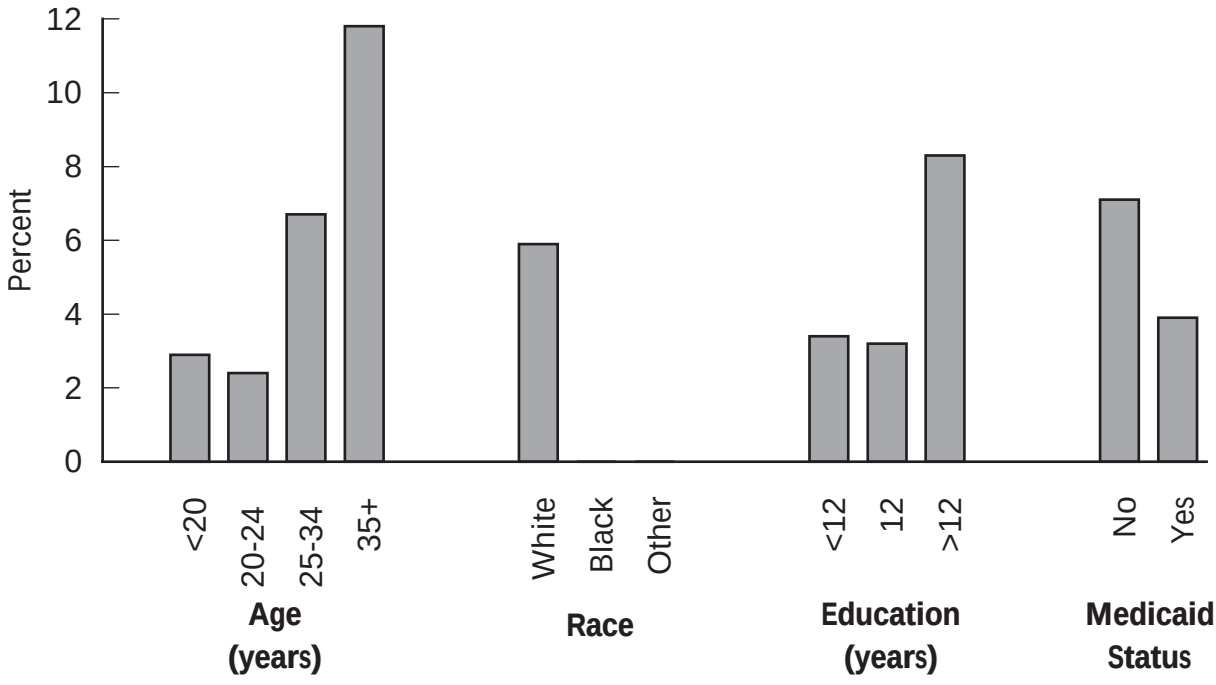


MAINE 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	99	2.9	2.0	0.0– 6.8
20–24	271	2.4	1.0	0.4– 4.3
25–34	663	6.7	1.1	4.6– 8.8
35+	147	11.8	3.1	5.8–17.9
Race				
White	1,155	5.9	0.8	4.4– 7.4
Black†	9	—	—	—
Other†	15	—	—	—
Education, years				
<12	126	3.4	1.8	0.0– 6.8
12	449	3.2	1.0	1.4– 5.1
>12	602	8.3	1.2	5.9–10.8
Medicaid recipient				
No	743	7.1	1.0	5.0– 9.1
Yes	437	3.9	1.1	1.9– 6.0

*Confidence interval. †30 respondents or less, not reported.

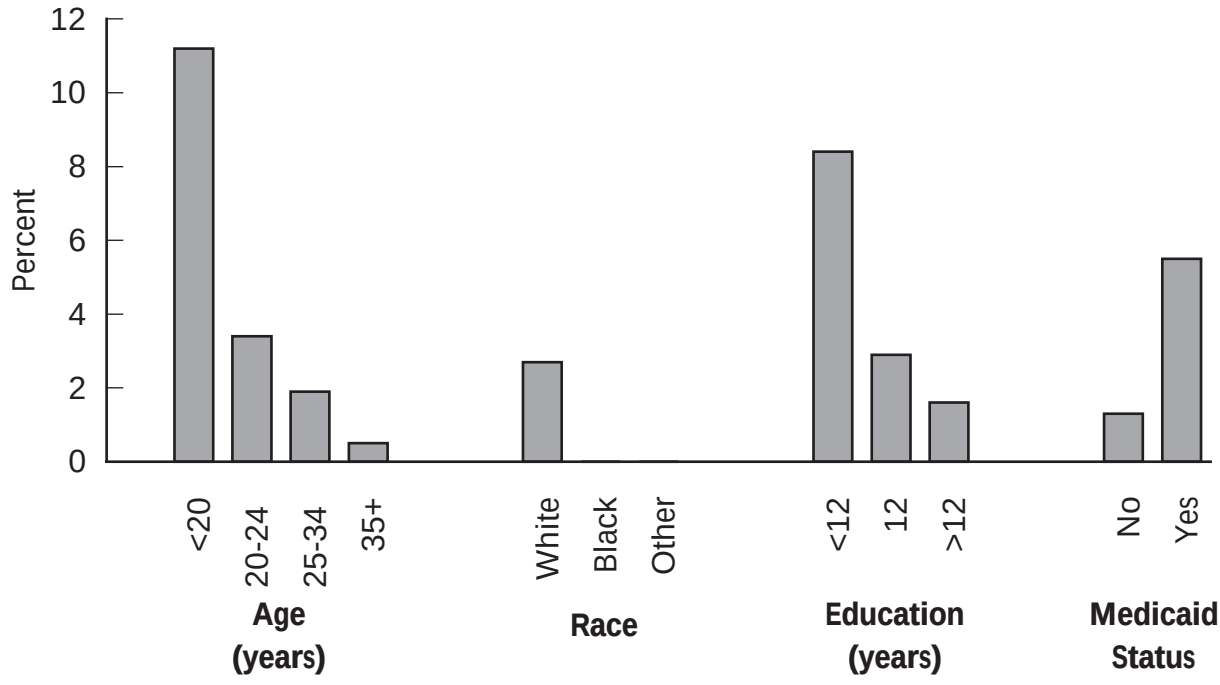


MAINE 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	99	11.2	3.8	3.7–18.7
20–24	267	3.4	1.3	0.9– 5.9
25–34	653	1.9	0.6	0.7– 3.1
35+	147	0.5	0.2	0.1– 0.9
Race				
White	1,140	2.7	0.6	1.6– 3.8
Black†	10	—	—	—
Other†	15	—	—	—
Education, years				
<12	123	8.4	3.0	2.5–14.3
12	444	2.9	0.9	1.1– 4.7
>12	596	1.6	0.6	0.5– 2.7
Medicaid recipient				
No	734	1.3	0.5	0.4– 2.2
Yes	432	5.5	1.3	3.0– 8.0

*Confidence interval. †30 respondents or less, not reported.

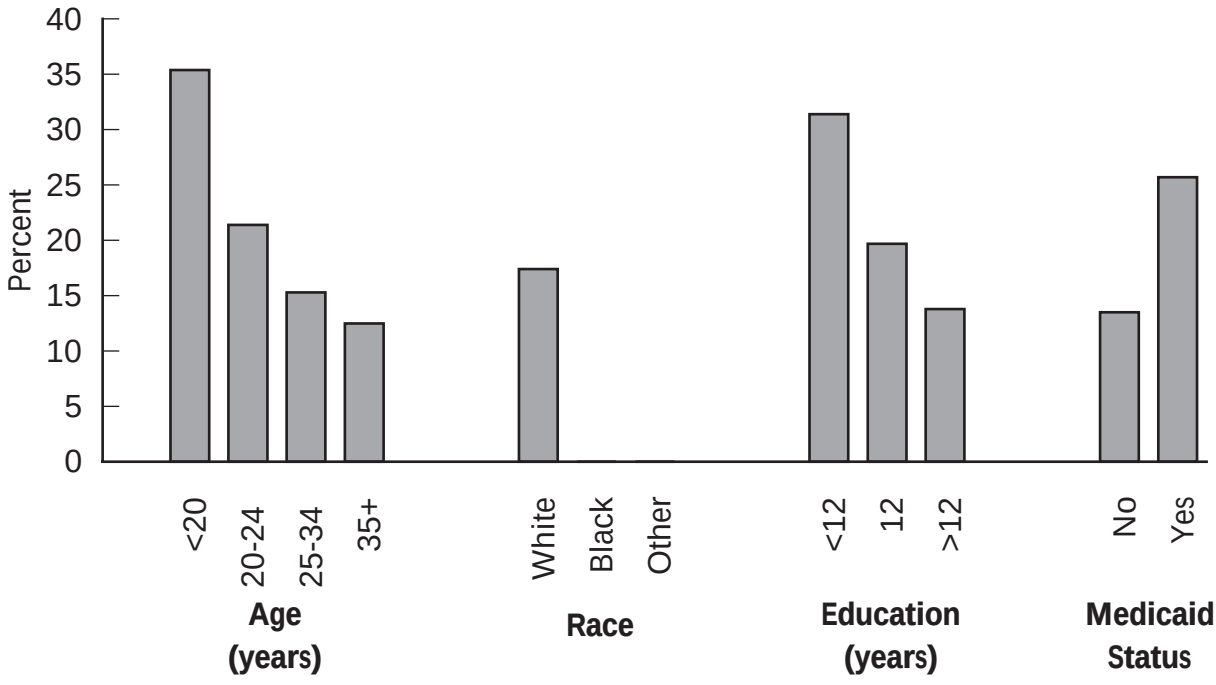


MAINE 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	99	35.4	5.7	24.1–46.6
20–24	267	21.4	2.8	15.9–27.0
25–34	664	15.3	1.6	12.2–18.4
35+	146	12.5	3.2	6.2–18.7
Race				
White	1,150	17.4	1.3	14.9–20.0
Black†	10	—	—	—
Other†	15	—	—	—
Education, years				
<12	124	31.4	4.8	22.0–40.9
12	450	19.7	2.2	15.4–24.1
>12	599	13.8	1.5	10.8–16.8
Medicaid recipient				
No	741	13.5	1.4	10.7–16.2
Yes	435	25.7	2.4	20.9–30.5

*Confidence interval. †30 respondents or less, not reported.



State Exhibits

MICHIGAN

PRAMS 1996 Surveillance Report

MICHIGAN 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		12.2		
20–24		23.5		
25–34		53.1		
35+		11.2		
Race				
White		79.1		
Black		18.4		
Other‡		2.5		
Education, years				
<12		17.9		
12		34.6		
>12		47.5		
Marital status				
Married		78.8		
Unmarried		21.2		
Birth weight				
LBW (<2500 g)		7.7		
NBW (≥2500 g)		92.3		
Annual household income				
<$15,000	654	32.0	1.8	28.5–35.5
$15,001–$30,000	277	20.0	1.6	16.8–23.1
$30,001–$40,000	148	14.2	1.4	11.4–17.1
>$40,001	391	33.8	1.9	30.1–37.5
In crowded household (>1 person/room)	1,539	7.7	1.0	5.7–9.7

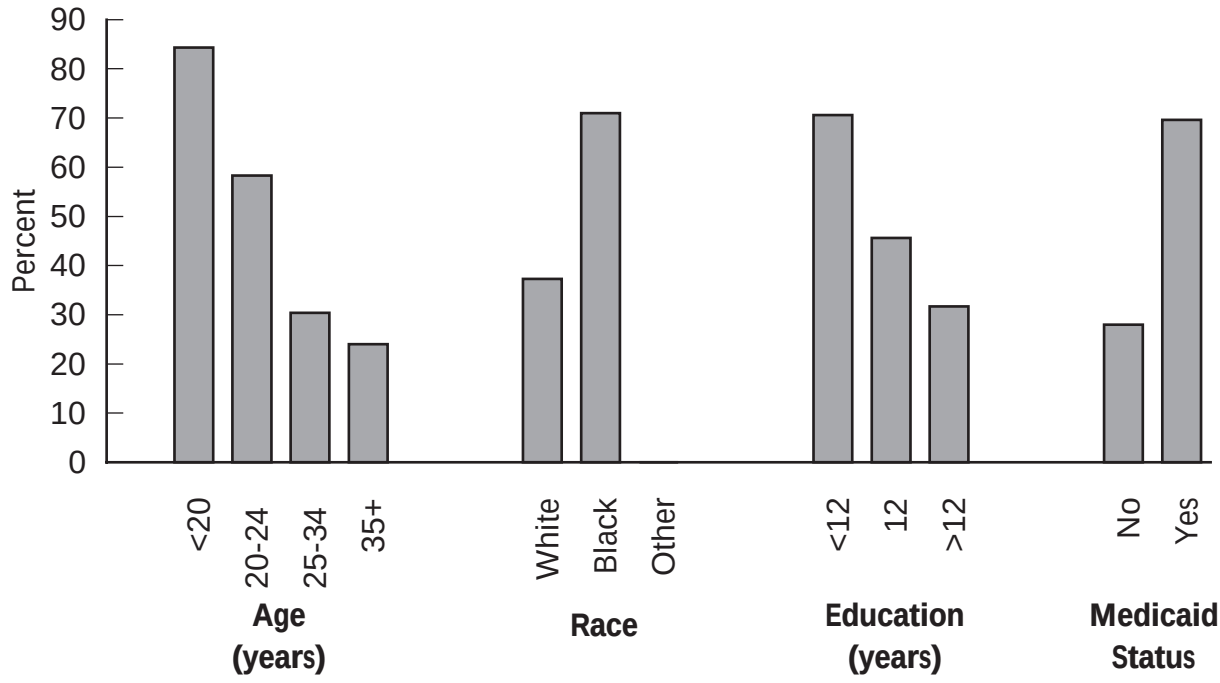
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American and Asian.
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data. Hispanic ethnicity was not available.

MICHIGAN 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	265	84.3	3.7	77.1–91.6
20–24	372	58.3	4.1	50.2–66.4
25–34	713	30.4	2.5	25.6–35.3
35+	156	24.0	5.0	14.2–33.9
Race				
White	742	37.3	2.4	32.7–41.9
Black	736	71.0	2.0	67.0–75.0
Other†	20	—	—	—
Education, years				
<12	342	70.6	4.6	61.5–79.6
12	511	45.6	3.4	38.9–52.4
>12	639	31.7	2.6	26.7–36.7
Medicaid recipient				
No	778	28.0	2.2	23.6–32.4
Yes	728	69.6	3.0	63.8–75.4

*Confidence interval. †30 respondents or less, not reported.

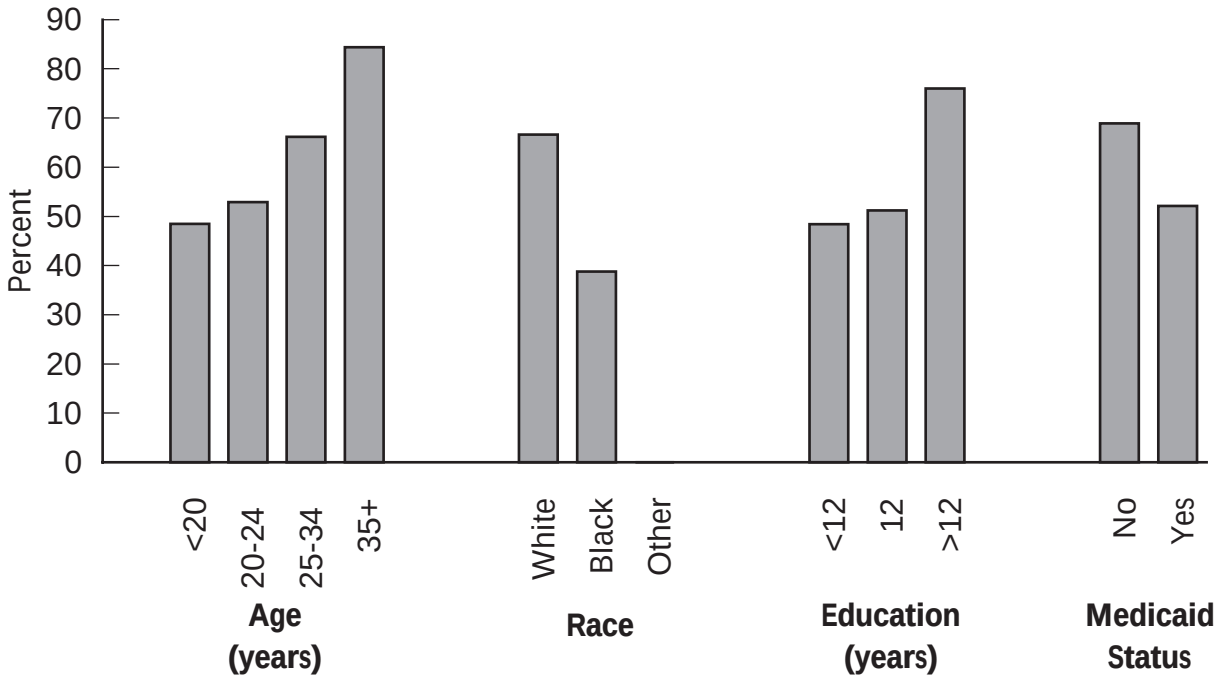


MICHIGAN 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	226	48.5	5.4	38.0–59.0
20–24	329	52.9	4.3	44.4–61.3
25–34	650	66.2	2.6	61.0–71.3
35+	142	84.4	4.2	76.3–92.6
Race				
White	743	66.6	2.3	62.2–71.0
Black	574	38.8	2.6	33.8–43.9
Other†	23	—	—	—
Education, years				
<12	277	48.4	5.1	38.5–58.4
12	466	51.2	3.5	44.3–58.0
>12	592	76.0	2.4	71.3–80.7
Medicaid recipient				
No	737	68.9	2.3	64.3–73.5
Yes	610	52.1	3.3	45.5–58.6

*Confidence interval. †30 respondents or less, not reported.

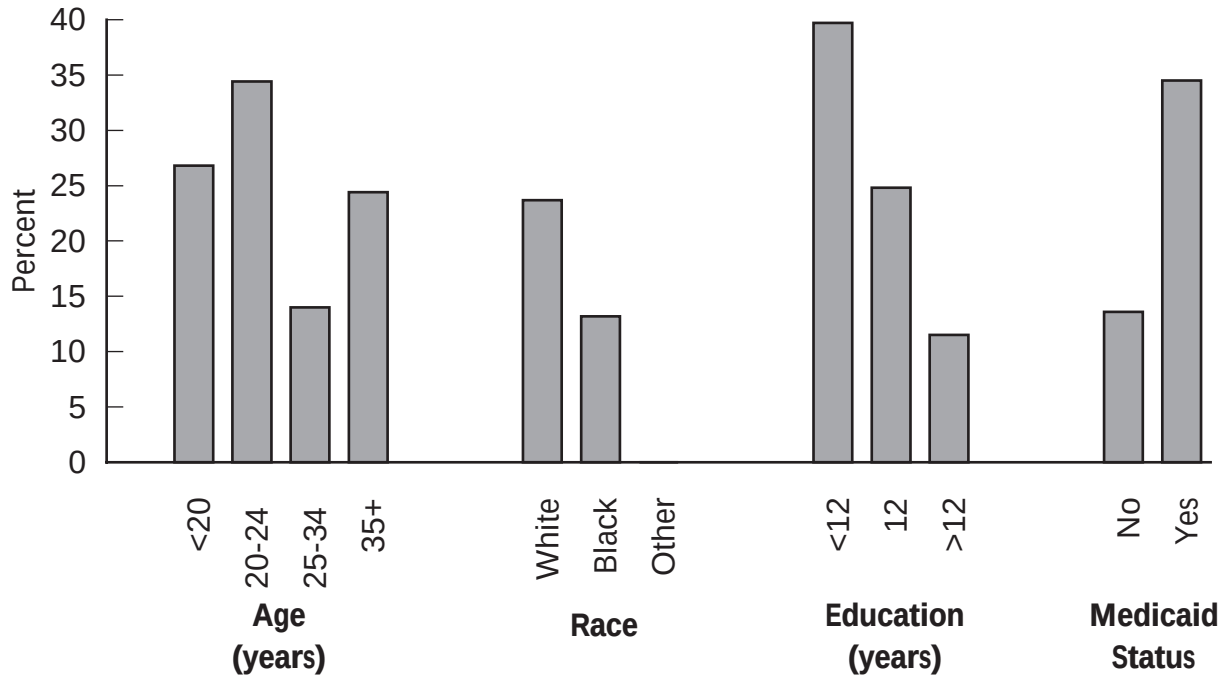


MICHIGAN 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	281	26.8	4.7	17.6–35.9
20–24	392	34.4	4.1	26.3–42.5
25–34	749	14.0	1.9	10.3–17.7
35+	162	24.4	5.3	14.0–34.9
Race				
White	783	23.7	2.1	19.7–27.7
Black	771	13.2	1.4	10.4–16.0
Other†	21	—	—	—
Education, years				
<12	360	39.7	4.6	30.8–48.7
12	549	24.8	3.0	18.9–30.7
>12	659	11.5	1.9	7.8–15.1
Medicaid recipient				
No	819	13.6	1.8	10.1–17.1
Yes	765	34.5	3.0	28.5–40.4

*Confidence interval. †30 respondents or less, not reported.

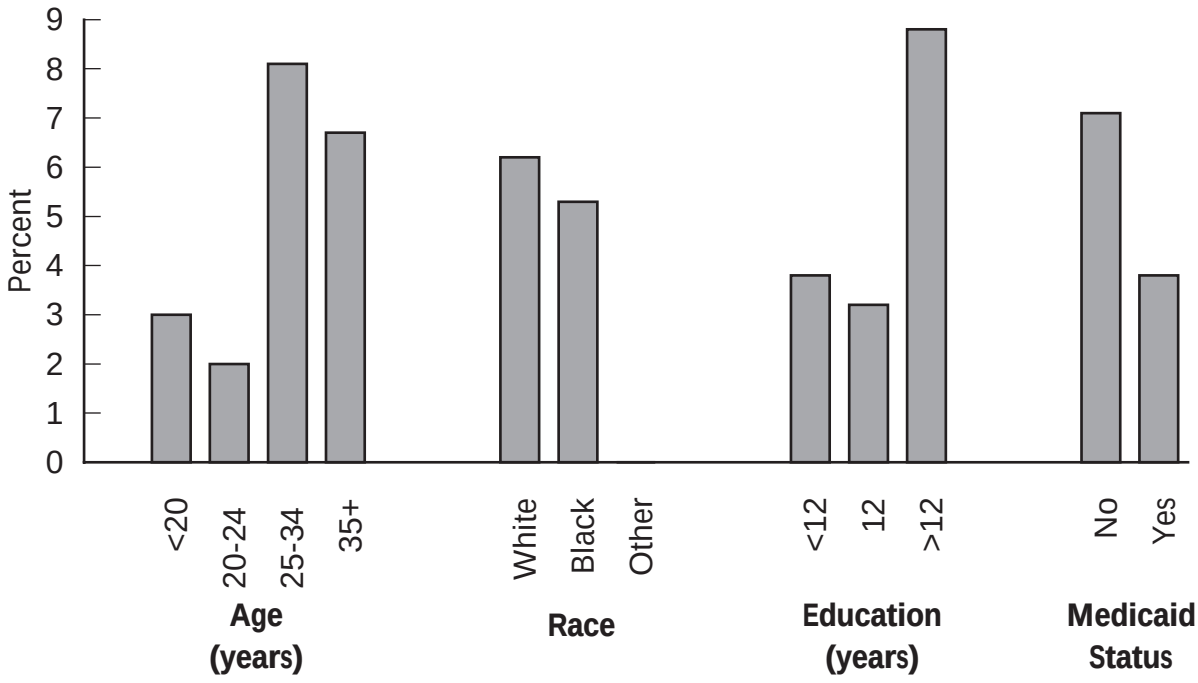


MICHIGAN 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	278	3.0	1.8	0.0– 6.5
20–24	392	2.0	0.8	0.4– 3.6
25–34	753	8.1	1.5	5.2–11.0
35+	164	6.7	2.7	1.5–11.9
Race				
White	786	6.2	1.1	4.1– 8.4
Black	769	5.3	1.0	3.4– 7.1
Other†	23	—	—	—
Education, years				
<12	360	3.8	1.2	1.4– 6.2
12	553	3.2	1.0	1.3– 5.1
>12	659	8.8	1.7	5.5–12.1
Medicaid recipient				
No	820	7.1	1.3	4.6– 9.7
Yes	767	3.8	1.0	1.9– 5.8

*Confidence interval. †30 respondents or less, not reported.

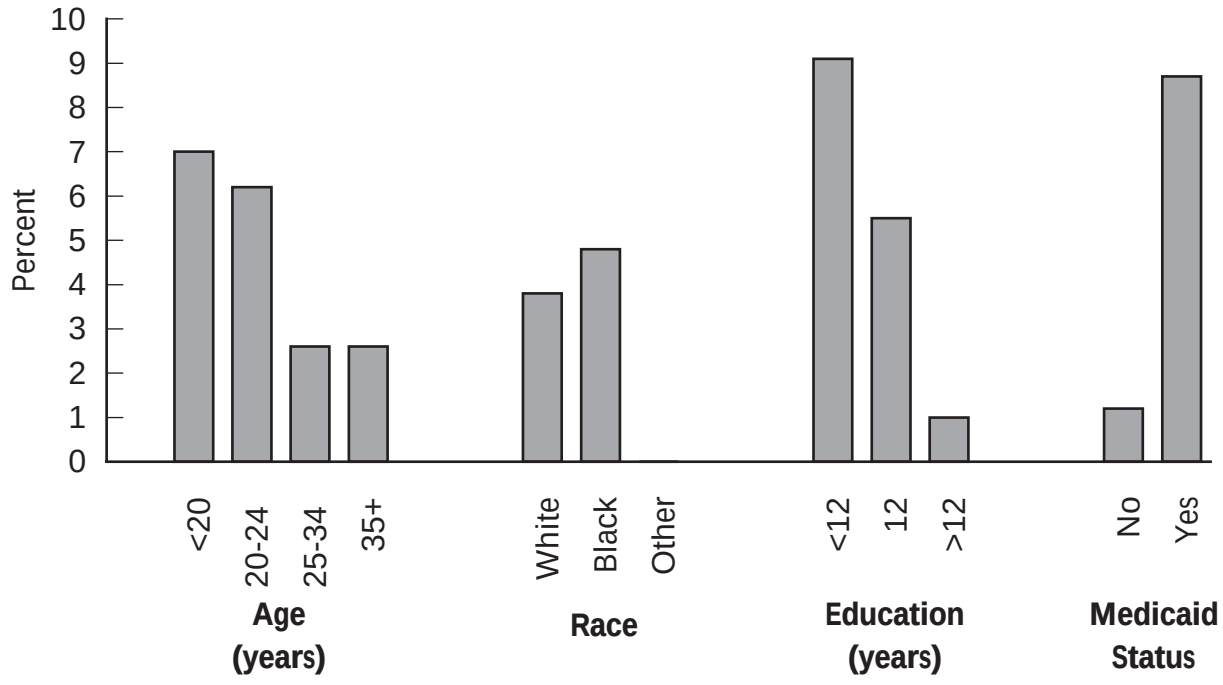


MICHIGAN 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	279	7.0	2.7	1.8–12.3
20–24	393	6.2	2.1	2.0–10.4
25–34	751	2.6	0.9	0.8– 4.4
35+	163	2.6	2.2	0.0– 6.9
Race				
White	783	3.8	1.0	1.9– 5.7
Black	772	4.8	0.9	3.0– 6.6
Other†	22	—	—	—
Education, years				
<12	365	9.1	2.8	3.7–14.5
12	547	5.5	1.7	2.1– 8.8
>12	659	1.0	0.4	0.2– 1.8
Medicaid recipient				
No	815	1.2	0.6	0.1– 2.3
Yes	771	8.7	1.9	4.9–12.4

*Confidence interval. †30 respondents or less, not reported.

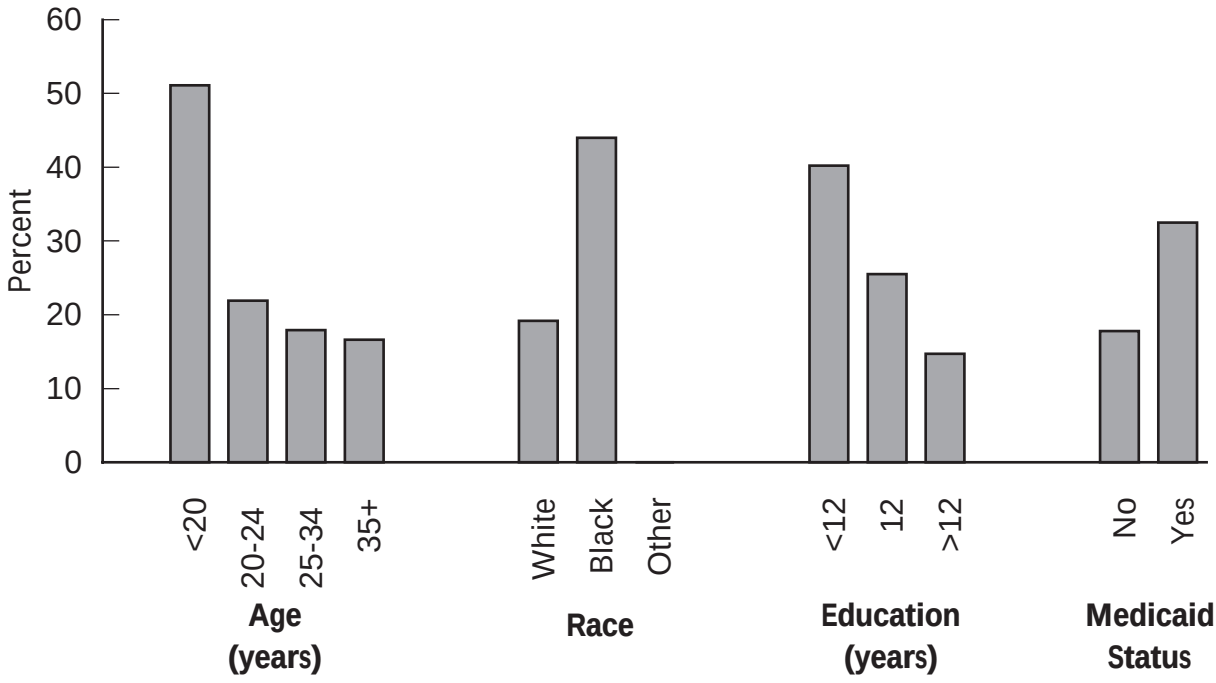


MICHIGAN 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	284	51.1	4.9	41.6–60.7
20–24	387	21.9	3.1	15.9–27.9
25–34	753	17.9	2.0	13.9–21.9
35+	165	16.6	4.2	8.4–24.9
Race				
White	787	19.2	1.9	15.5–23.0
Black	771	44.0	2.2	39.7–48.3
Other†	23	—	—	—
Education, years				
<12	366	40.2	4.3	31.8–48.7
12	548	25.5	2.8	19.9–31.1
>12	660	14.7	1.9	10.9–18.4
Medicaid recipient				
No	820	17.8	1.9	14.0–21.6
Yes	769	32.5	2.7	27.2–37.8

*Confidence interval. †30 respondents or less, not reported.



State Exhibits

NEW YORK

PRAMS 1996 Surveillance Report

NEW YORK 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		8.4		
20–24		17.6		
25–34		58.2		
35+		15.8		
Race				
White		86.6		
Black		10.5		
Other‡		2.9		
Hispanic ethnicity				
Yes		10.1		
No		89.9		
Education, years				
<12		14.6		
12		31.3		
>12		54.0		
Marital status				
Married		72.3		
Unmarried		27.7		
Birth weight				
LBW (<2500 g)		6.7		
NBW (≥2500 g)		93.3		
Annual household income				
<$15,999	333	24.7	1.7	21.3–28.0
$16,000–$24,999	136	9.7	1.1	7.5–11.8
$25,000–$39,999	246	18.0	1.4	15.3–20.8
>$40,000	569	47.6	1.9	44.0–51.3
In crowded household (>1 person/room)	1,307	7.9	1.1	5.8–10.1

*PRAMS-eligible population is defined as state residents who had in-state births, excluding New York City.
†Confidence interval.
‡Other includes Native American and Asian.
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

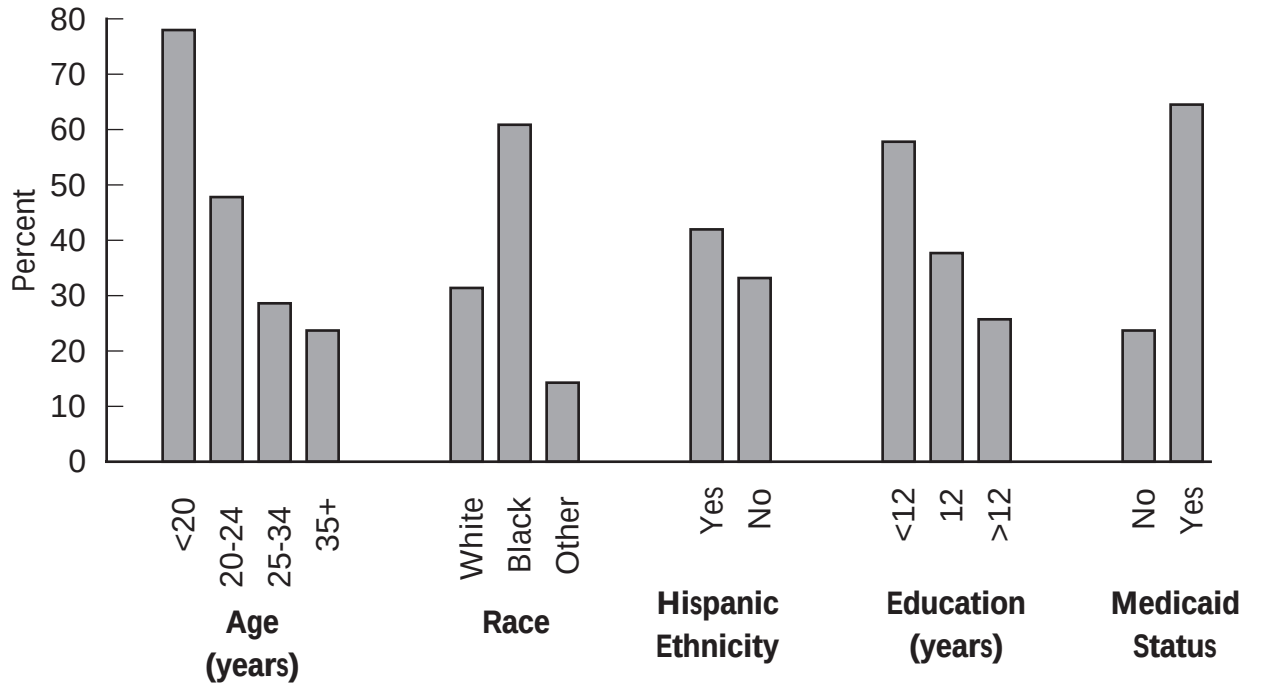
NEW YORK 1996*
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20	108	78.0	5.9	66.5–89.5
20–24	208	47.8	4.8	38.4–57.3
25–34	746	28.6	2.2	24.2–32.9
35+	215	23.7	4.1	15.7–31.7
Race				
White	1,084	31.4	1.9	27.6–35.1
Black	149	60.9	6.4	48.4–73.4
Other	33	14.3	7.9	0.0–29.7
Ethnicity				
Hispanic	75	42.0	7.8	26.7-57.2
Non-Hispanic	858	33.2	2.2	29.0-37.5
Education, years				
<12	165	57.8	5.7	46.7–69.0
12	391	37.7	3.5	30.9–44.5
>12	688	25.7	2.2	21.5–29.9
Medicaid recipient				
No	929	23.7	1.8	20.1–27.2
Yes	348	64.5	3.9	56.9–72.1

*Data do not include New York City.

†Confidence interval.



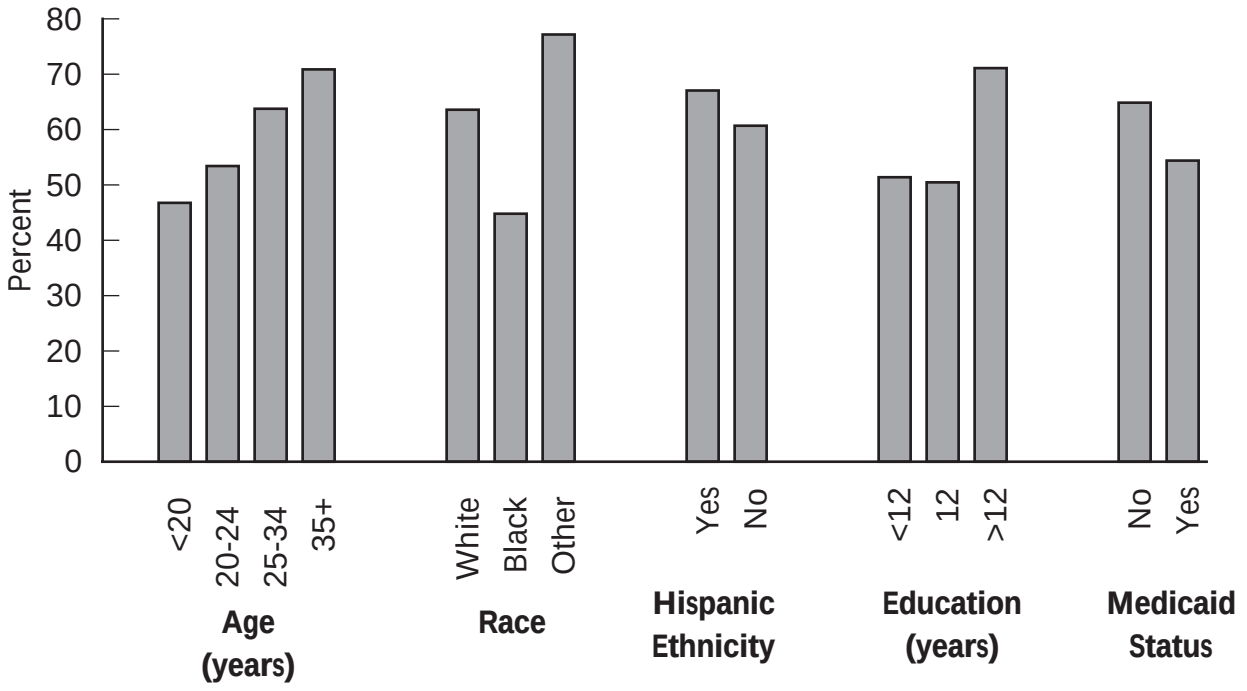
NEW YORK 1996*
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20	101	46.8	7.2	32.7–61.0
20–24	208	53.4	4.7	44.3–62.6
25–34	754	63.8	2.3	59.3–68.3
35+	228	70.9	4.1	62.9–78.9
Race				
White	1,111	63.6	1.9	59.9–67.3
Black	134	44.8	6.7	31.8–57.9
Other	37	77.2	10.2	57.3–97.2
Ethnicity				
Hispanic	73	67.1	7.8	51.9-82.4
Non-Hispanic	882	60.7	2.2	56.5-64.9
Education, years				
<12	161	51.4	5.6	40.5–62.4
12	395	50.5	3.4	43.8–57.2
>12	704	71.1	2.2	66.9–75.4
Medicaid recipient				
No	944	64.9	2.0	61.0–68.8
Yes	347	54.4	3.9	46.7–62.1

*Data do not include New York City.

†Confidence interval.

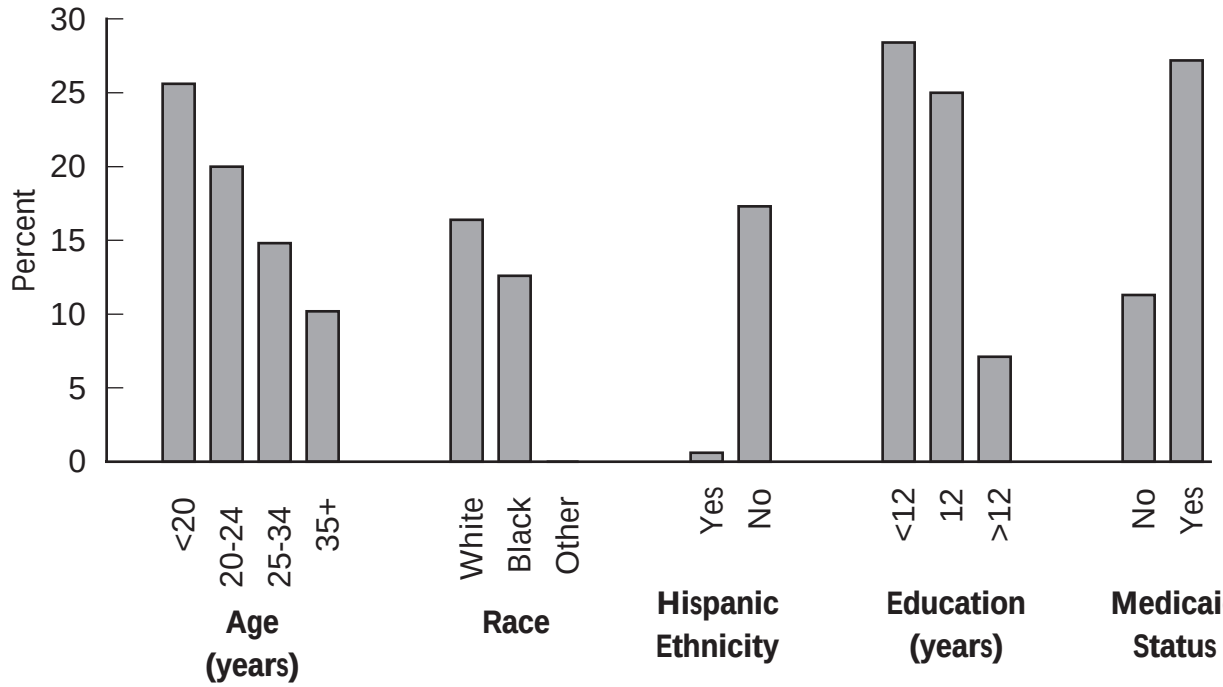


NEW YORK 1996*
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20	119	25.6	6.3	13.2–38.0
20–24	227	20.0	3.7	12.7–27.3
25–34	781	14.8	1.7	11.4–18.2
35+	235	10.2	2.6	5.1–15.4
Race				
White	1,151	16.4	1.5	13.5–19.3
Black	163	12.6	4.4	4.1–21.2
Other	36	0.0	0.0	0.0– 0.0
Ethnicity				
Hispanic	80	0.6	0.3	0.0- 1.1
Non-Hispanic	915	17.3	1.7	13.9-20.6
Education, years				
<12	187	28.4	4.8	19.0–37.9
12	418	25.0	3.0	19.2–30.8
>12	721	7.1	1.3	4.6– 9.5
Medicaid recipient				
No	972	11.3	1.3	8.7–13.8
Yes	390	27.2	3.4	20.5–33.9

*Data do not include New York City. †Confidence interval.

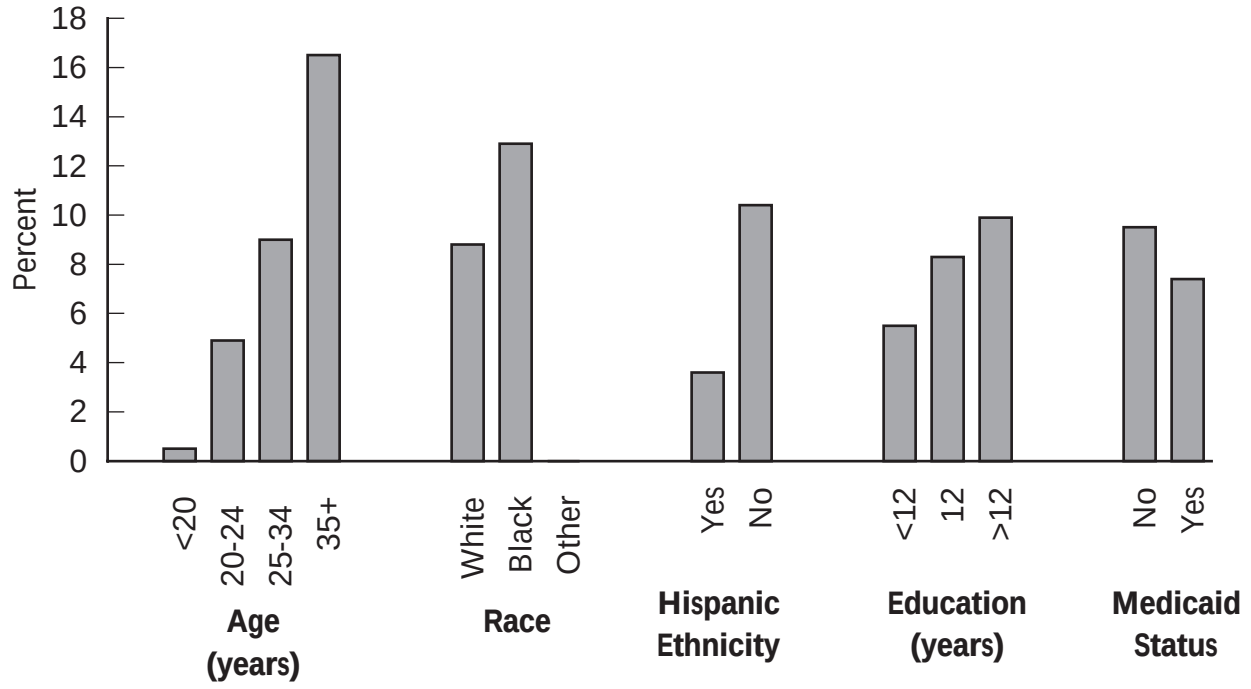


NEW YORK 1996*
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20	116	0.5	0.3	0.0– 1.2
20–24	225	4.9	2.3	0.4– 9.5
25–34	770	9.0	1.3	6.3–11.6
35+	230	16.5	3.5	9.6–23.4
Race				
White	1,145	8.8	1.1	6.6–11.0
Black	155	12.9	4.9	3.2–22.5
Other	33	0.0	0.0	0.0– 0.0
Ethnicity				
Hispanic	74	3.6	3.3	0.0-10.1
Non-Hispanic	901	10.4	1.4	7.7-13.1
Education, years				
<12	182	5.5	2.9	0.0–11.3
12	413	8.3	2.0	4.3–12.4
>12	713	9.9	1.4	7.1–12.7
Medicaid recipient				
No	962	9.5	1.2	7.1–12.0
Yes	379	7.4	2.2	3.1–11.8

*Data do not include New York City. †Confidence interval.

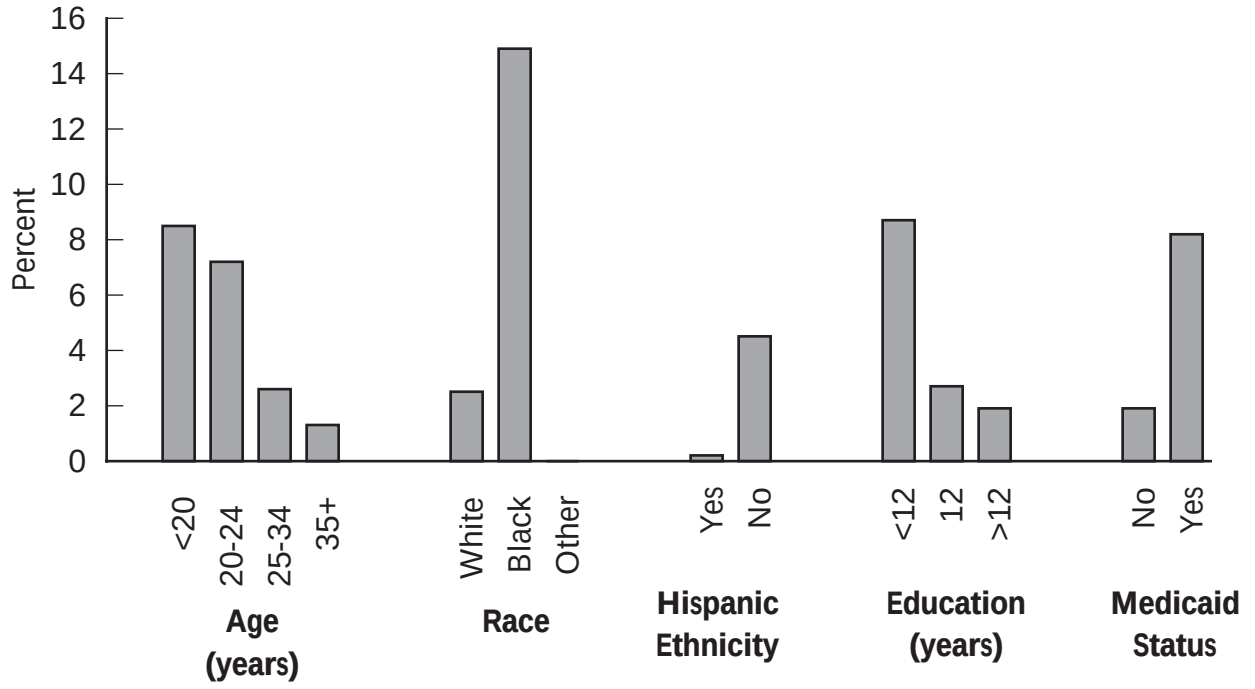


NEW YORK 1996*
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20	110	8.5	4.3	0.1–17.0
20–24	221	7.2	2.6	2.0–12.4
25–34	759	2.6	0.9	1.0– 4.3
35+	228	1.3	1.3	0.0– 3.9
Race				
White	1,124	2.5	0.7	1.2– 3.9
Black	148	14.9	4.9	5.3–24.4
Other	36	0.0	0.0	0.0– 0.0
Ethnicity				
Hispanic	71	0.2	0.2	0.0- 0.6
Non-Hispanic	899	4.5	1.0	2.5- 6.6
Education, years				
<12	174	8.7	3.4	2.0–15.5
12	408	2.7	1.2	0.3– 5.0
>12	707	1.9	0.7	0.5– 3.3
Medicaid recipient				
No	952	1.9	0.7	0.6– 3.2
Yes	366	8.2	2.2	3.9–12.5

*Data do not include New York City. †Confidence interval.

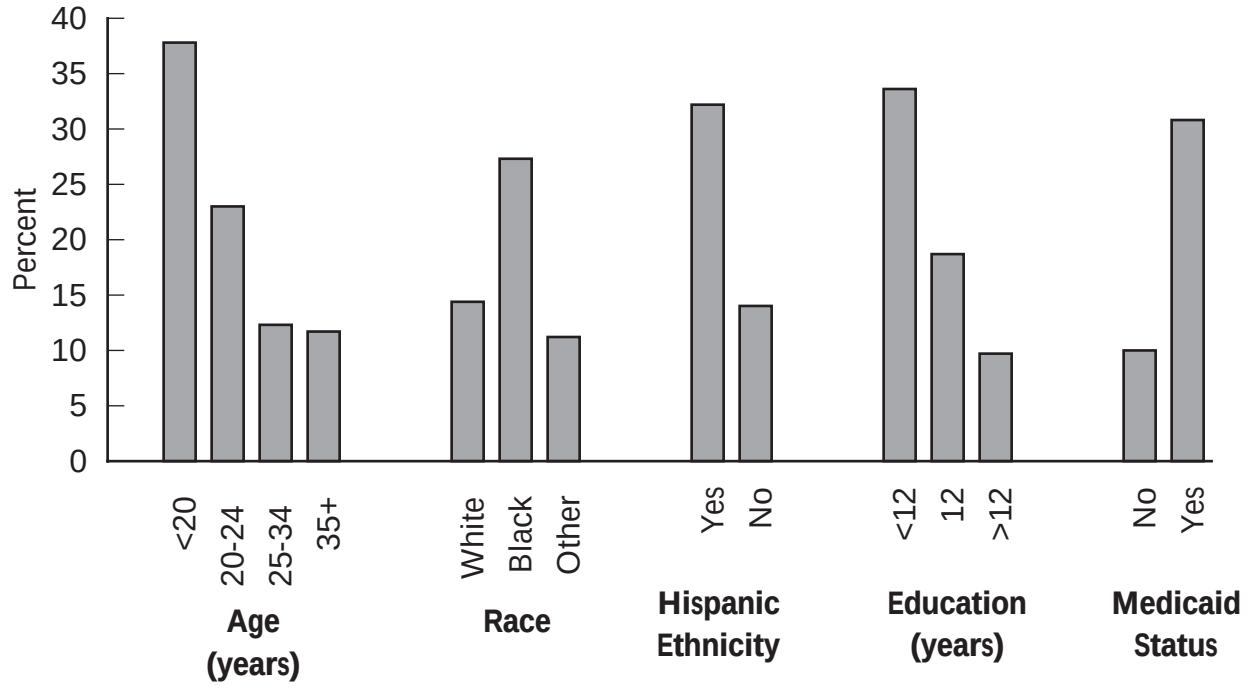


NEW YORK 1996*
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20	119	37.8	6.8	24.5–51.2
20–24	231	23.0	4.0	15.2–30.9
25–34	778	12.3	1.6	9.1–15.5
35+	237	11.7	3.0	5.8–17.5
Race				
White	1,153	14.4	1.4	11.6–17.2
Black	165	27.3	5.6	16.3–38.3
Other	36	11.2	7.0	0.0–25.1
Ethnicity				
Hispanic	78	32.2	7.3	17.9-46.4
Non-Hispanic	915	14.0	1.6	10.9-17.1
Education, years				
<12	192	33.6	5.2	23.4–43.8
12	420	18.7	2.7	13.4–24.1
>12	720	9.7	1.5	6.8–12.5
Medicaid recipient				
No	970	10.0	1.3	7.4–12.5
Yes	395	30.8	3.5	23.9–37.7

*Data do not include New York City. †Confidence interval.



State Exhibits

OKLAHOMA

PRAMS 1996 Surveillance Report

OKLAHOMA 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		17.1		
20–24		31.2		
25–34		43.7		
35+		8.1		
Race				
White		79.0		
Black		9.8		
Other‡		11.2		
Hispanic ethnicity				
Yes		6.3		
No		93.7		
Education, years				
<12		22.9		
12		37.0		
>12		40.2		
Marital status				
Married		69.0		
Unmarried		31.0		
Birth weight				
LBW (<2500 g)		6.8		
NBW (≥2500 g)		93.2		
Annual household income				
<$15,999	806	47.4	2.0	43.5–51.3
$16,000–$24,999	332	19.9	1.6	16.8–23.1
$25,000–$39,999	304	13.9	1.3	11.3–16.4
>$40,000	324	18.8	1.5	15.8–21.8
In crowded household (>1 person/room)	1,949	11.7	1.3	9.2–14.1

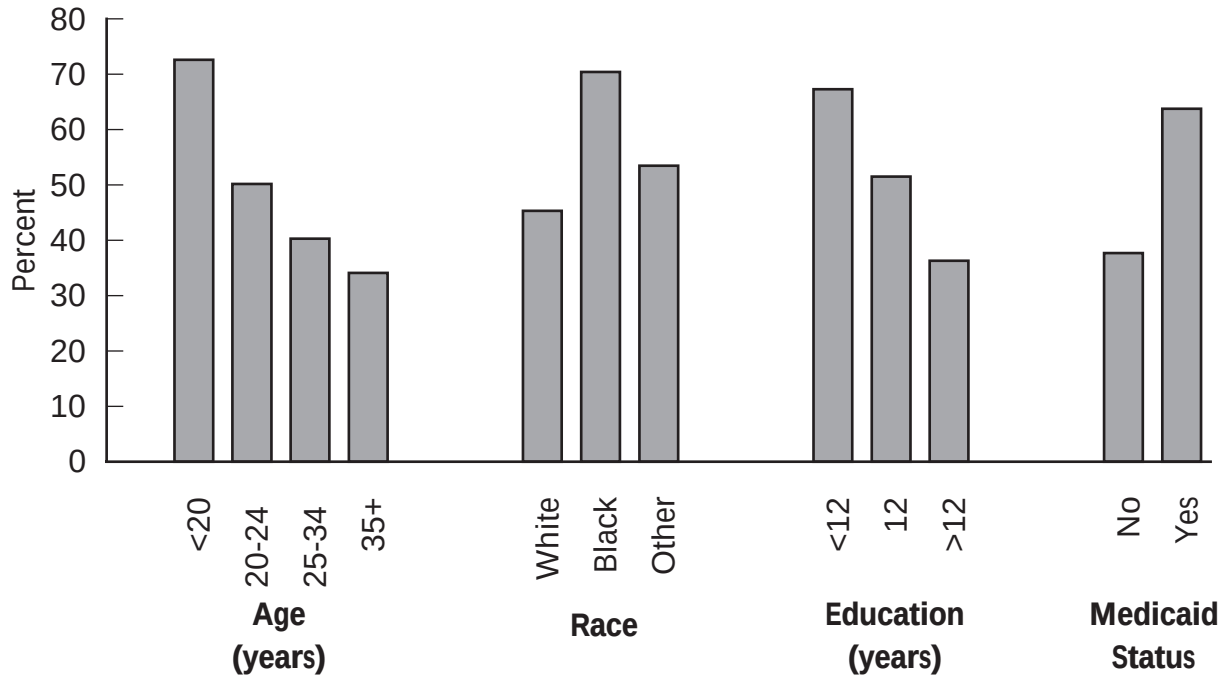
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American (9.4%) and Asian (1.7%).
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from the PRAMS sampling frame.

OKLAHOMA 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	325	72.6	4.2	64.4–80.8
20–24	568	50.2	3.6	43.2–57.3
25–34	857	40.3	2.8	34.9–45.8
35+	166	34.1	6.1	22.1–46.1
Race				
White	1,475	45.3	2.1	41.1–49.4
Black	220	70.4	5.8	59.0–81.8
Other	185	53.5	6.0	41.7–65.2
Education, years				
<12	345	67.3	4.2	59.1–75.5
12	682	51.5	3.2	45.2–57.8
>12	737	36.3	2.9	30.7–42.0
Medicaid recipient				
No	1,143	37.7	2.4	33.1–42.4
Yes	778	63.8	2.9	58.0–69.5

*Confidence interval.

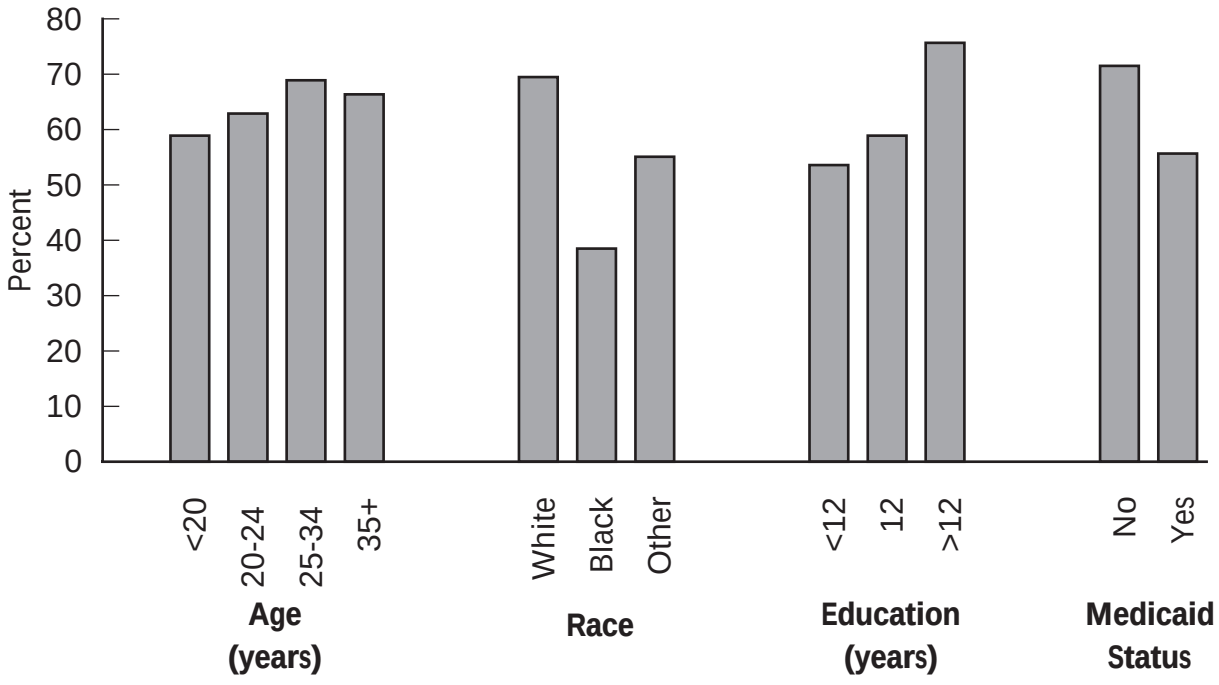


OKLAHOMA 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	312	58.9	4.5	50.0–67.8
20–24	557	62.9	3.5	56.1–69.7
25–34	834	68.9	2.6	63.9–73.9
35+	178	66.4	6.0	54.7–78.1
Race				
White	1,452	69.5	1.9	65.8–73.3
Black	204	38.5	6.3	26.1–50.9
Other	186	55.1	5.9	43.5–66.6
Education, years				
<12	344	53.6	4.4	45.0–62.1
12	657	58.9	3.1	52.7–65.1
>12	732	75.7	2.5	70.8–80.6
Medicaid recipient				
No	1,115	71.5	2.2	67.3–75.8
Yes	771	55.7	3.0	49.8–61.6

*Confidence interval.

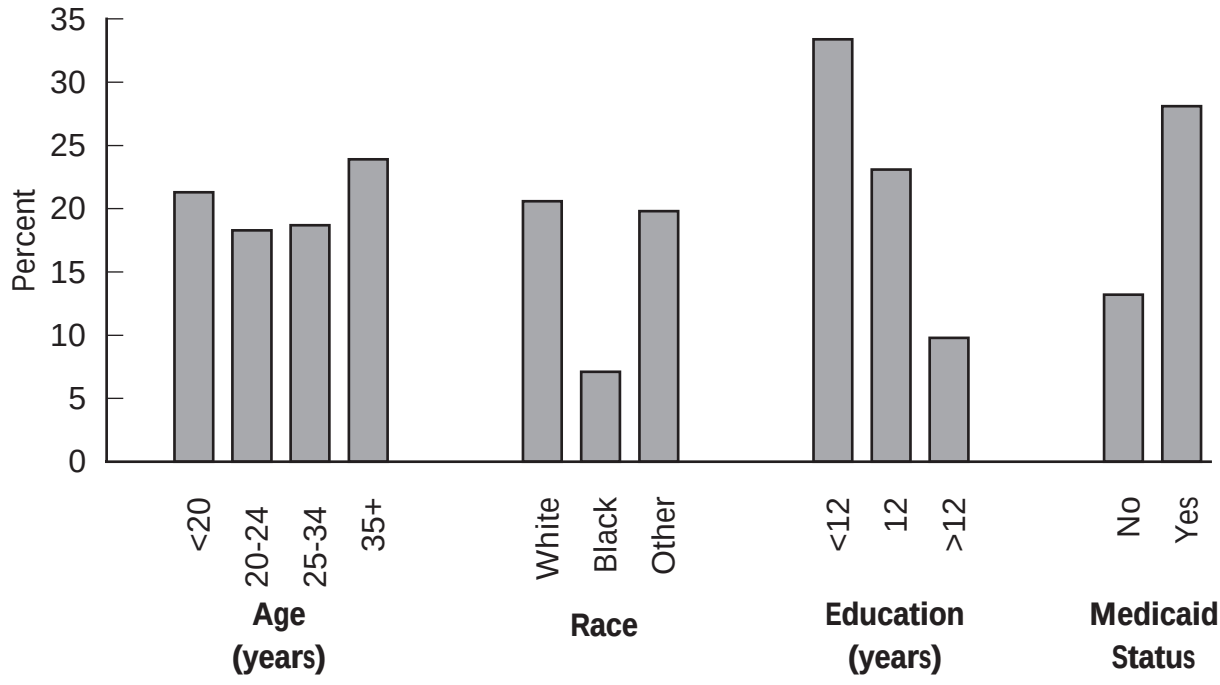


OKLAHOMA 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	334	21.3	3.8	13.8–28.8
20–24	602	18.3	2.7	12.9–23.6
25–34	884	18.7	2.2	14.3–23.0
35+	178	23.9	5.5	13.2–34.6
Race				
White	1,540	20.6	1.7	17.3–24.0
Black	230	7.1	3.0	1.3–12.9
Other	190	19.8	5.0	10.1–29.6
Education, years				
<12	361	33.4	4.2	25.3–41.6
12	718	23.1	2.7	17.9–28.4
>12	762	9.8	1.8	6.3–13.4
Medicaid recipient				
No	1,179	13.2	1.7	10.0–16.4
Yes	825	28.1	2.7	22.8–33.4

*Confidence interval.

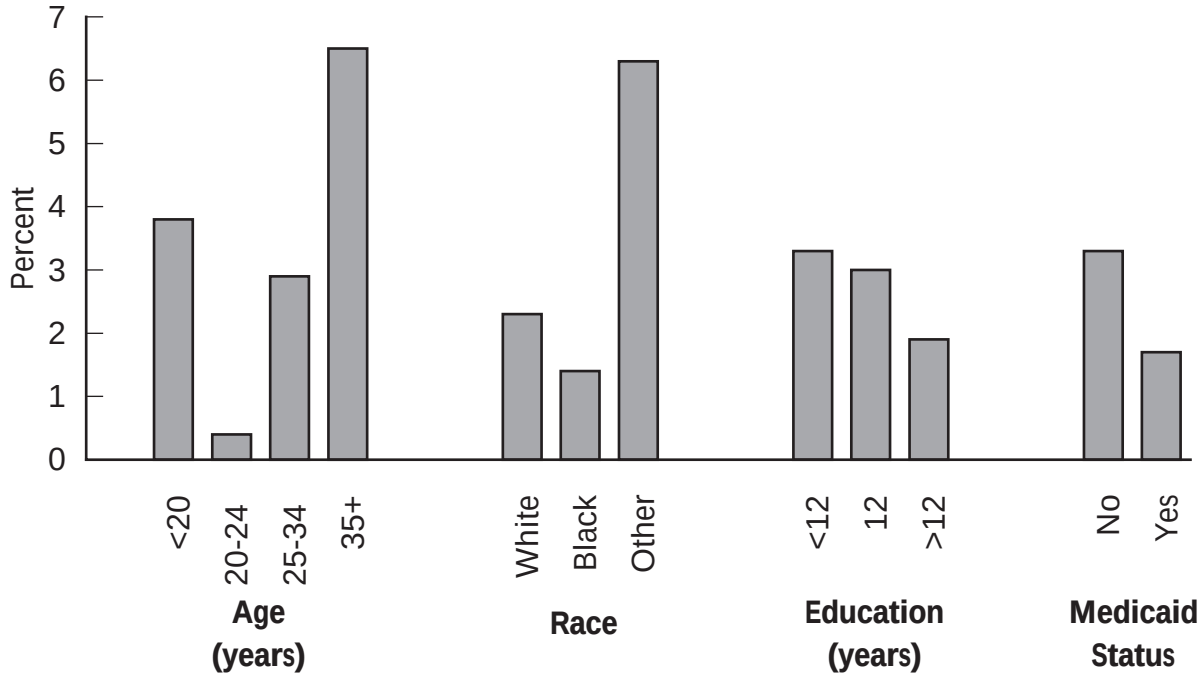


OKLAHOMA 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	347	3.8	1.9	0.1– 7.5
20–24	600	0.4	0.1	0.1– 0.6
25–34	884	2.9	0.9	1.1– 4.7
35+	179	6.5	3.1	0.4–12.6
Race				
White	1,548	2.3	0.6	1.1– 3.6
Black	230	1.4	0.4	0.5– 2.3
Other	194	6.3	3.2	0.1–12.6
Education, years				
<12	371	3.3	1.7	0.0– 6.5
12	716	3.0	1.1	0.9– 5.0
>12	766	1.9	0.8	0.4– 3.4
Medicaid recipient				
No	1,185	3.3	0.9	1.6– 5.1
Yes	831	1.7	0.7	0.2– 3.1

*Confidence interval.

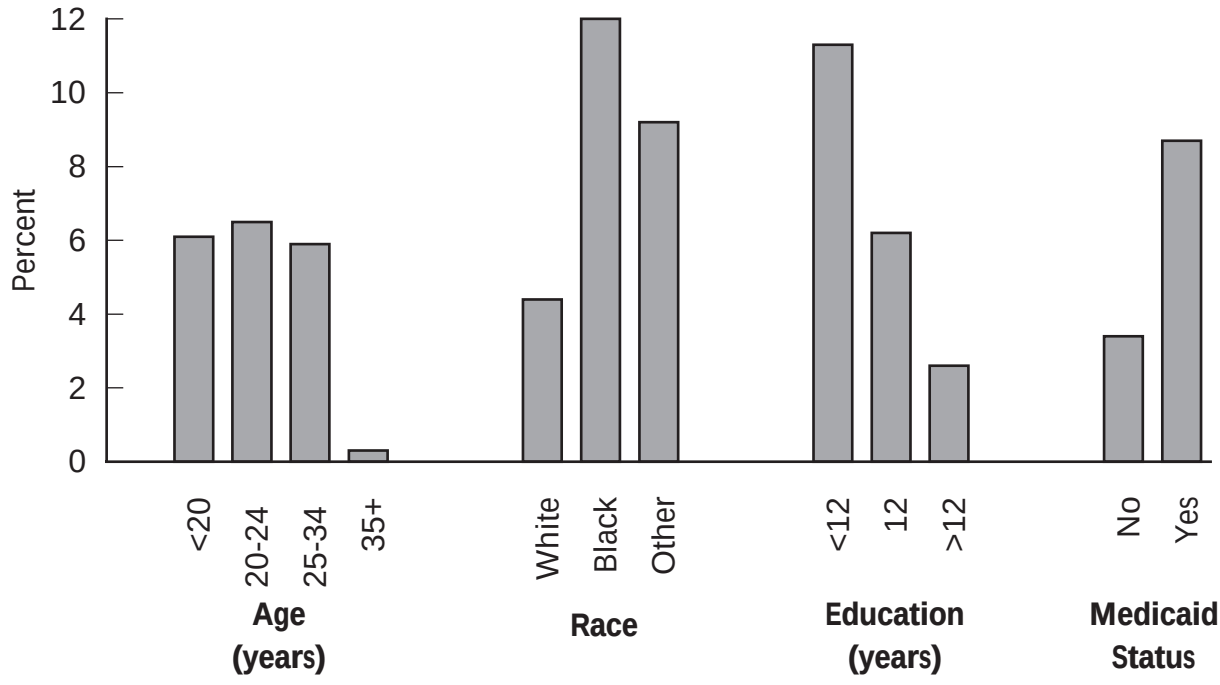


OKLAHOMA 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	344	6.1	2.1	2.0–10.3
20–24	599	6.5	1.8	2.8–10.1
25–34	880	5.9	1.4	3.2– 8.5
35+	180	0.3	0.3	0.0– 0.9
Race				
White	1,542	4.4	0.9	2.7– 6.1
Black	232	12.0	4.3	3.5–20.4
Other	191	9.2	3.5	2.3–16.0
Education, years				
<12	373	11.3	2.8	5.7–16.8
12	713	6.2	1.6	3.2– 9.3
>12	761	2.6	0.9	0.9– 4.4
Medicaid recipient				
No	1,178	3.4	0.9	1.6– 5.3
Yes	831	8.7	1.7	5.4–12.1

*Confidence interval.

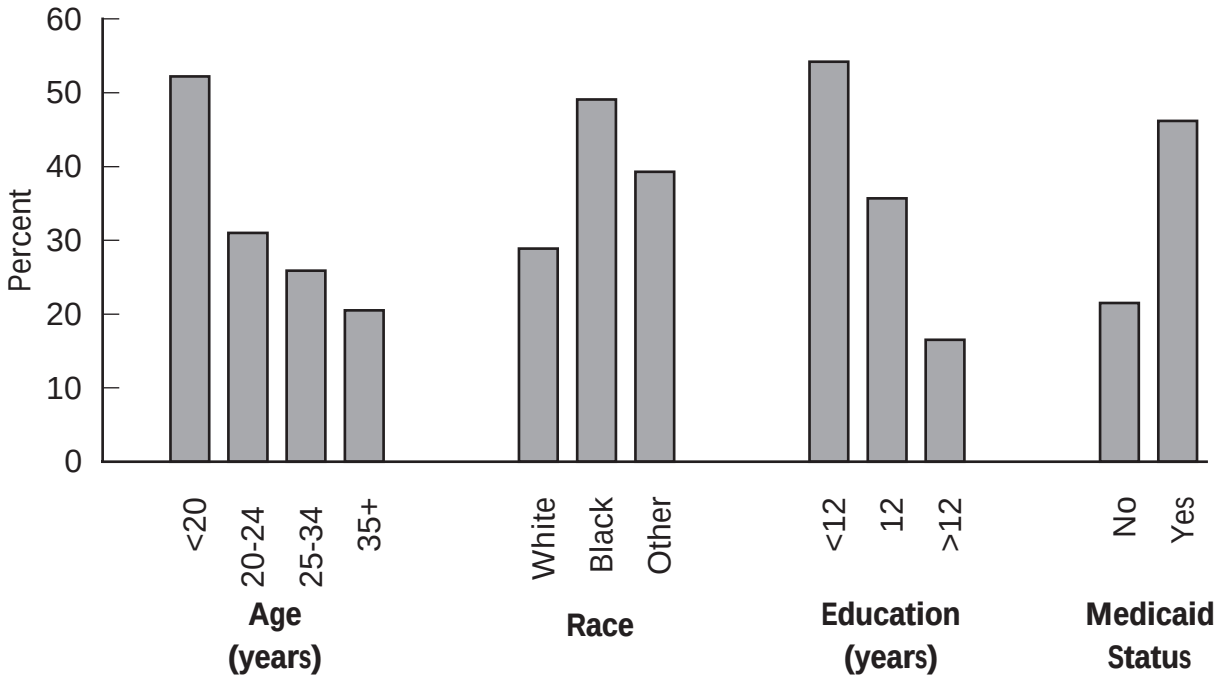


OKLAHOMA 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	349	52.2	4.6	43.2–61.1
20–24	601	31.0	3.3	24.6–37.4
25–34	890	25.9	2.5	21.1–30.7
35+	183	20.5	4.9	10.9–30.1
Race				
White	1,562	28.9	1.9	25.1–32.6
Black	231	49.1	6.4	36.5–61.6
Other	193	39.3	5.9	27.8–50.8
Education, years				
<12	379	54.2	4.3	45.8–62.7
12	718	35.7	3.0	29.7–41.7
>12	768	16.5	2.2	12.2–20.7
Medicaid recipient				
No	1,187	21.5	2.0	17.6–25.4
Yes	842	46.2	3.0	40.4–52.1

*Confidence interval.



State Exhibits

SOUTH CAROLINA

PRAMS 1996 Surveillance Report

SOUTH CAROLINA 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		17.3		
20–24		27.7		
25–34		45.9		
35+		9.2		
Race				
White		62.3		
Black		36.2		
Other‡		1.6		
Hispanic ethnicity				
Yes		1.9		
No		98.1		
Education, years				
<12		22.6		
12		38.1		
>12		39.3		
Marital status				
Married		61.8		
Unmarried		38.2		
Birth weight				
LBW (<2500 g)		9.2		
NBW (≥2500 g)		90.8		
Annual household income				
<$15,999	836	41.5	1.6	38.3–44.6
$16,000–$24,999	299	16.9	1.2	14.5–19.3
$25,000–$39,999	299	16.7	1.2	14.3–19.0
>$40,000	416	25.0	1.4	22.3–27.7
In crowded household (>1 person/room)	1,928	12.8	1.1	10.7–14.9

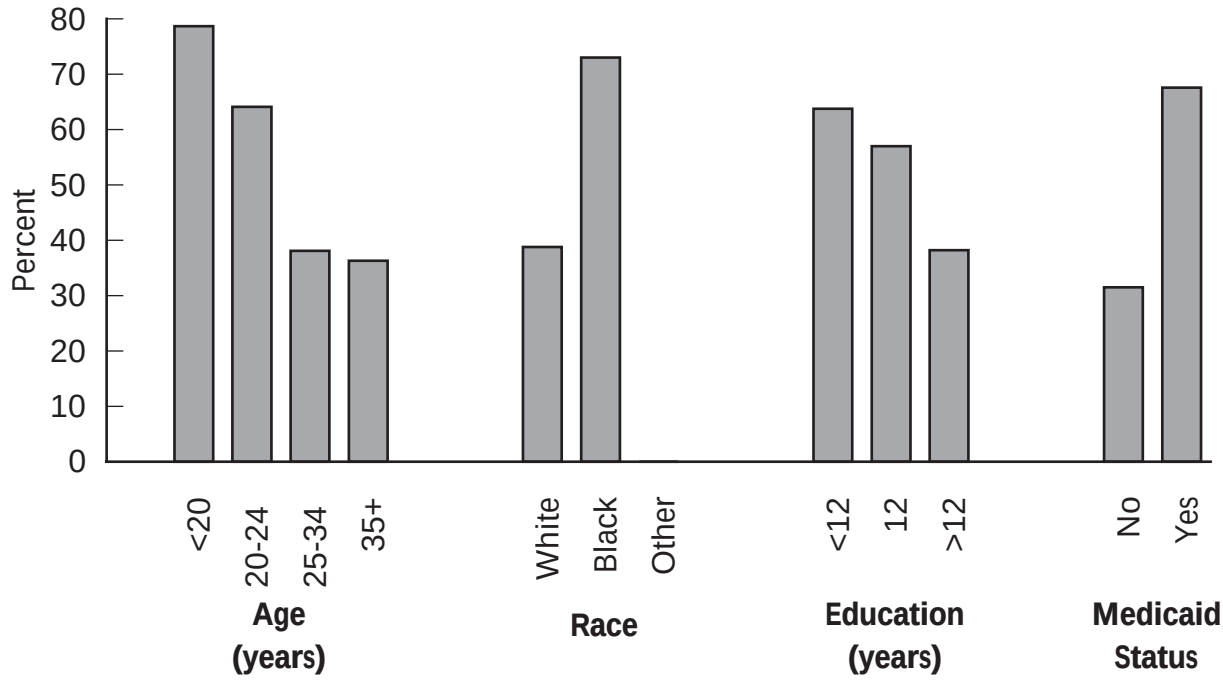
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American, Asian, and other nonwhite.
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

SOUTH CAROLINA 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	384	78.7	3.2	72.5–85.0
20–24	519	61.0	3.0	55.1–66.9
25–34	900	38.1	2.2	33.7–42.5
35+	152	36.3	5.3	25.8–46.7
Race				
White	1,092	38.8	1.9	35.1–42.5
Black	841	73.0	2.5	68.2–77.8
Other†	22	—	—	—
Education, years				
<12	409	63.8	3.5	56.9–70.8
12	772	57.0	2.6	51.9–62.1
>12	694	38.2	2.4	33.4–42.9
Medicaid recipient				
No	795	31.5	2.2	27.3–35.8
Yes	1,160	67.6	2.0	63.6–71.6

*Confidence interval. †30 respondents or less, not reported.

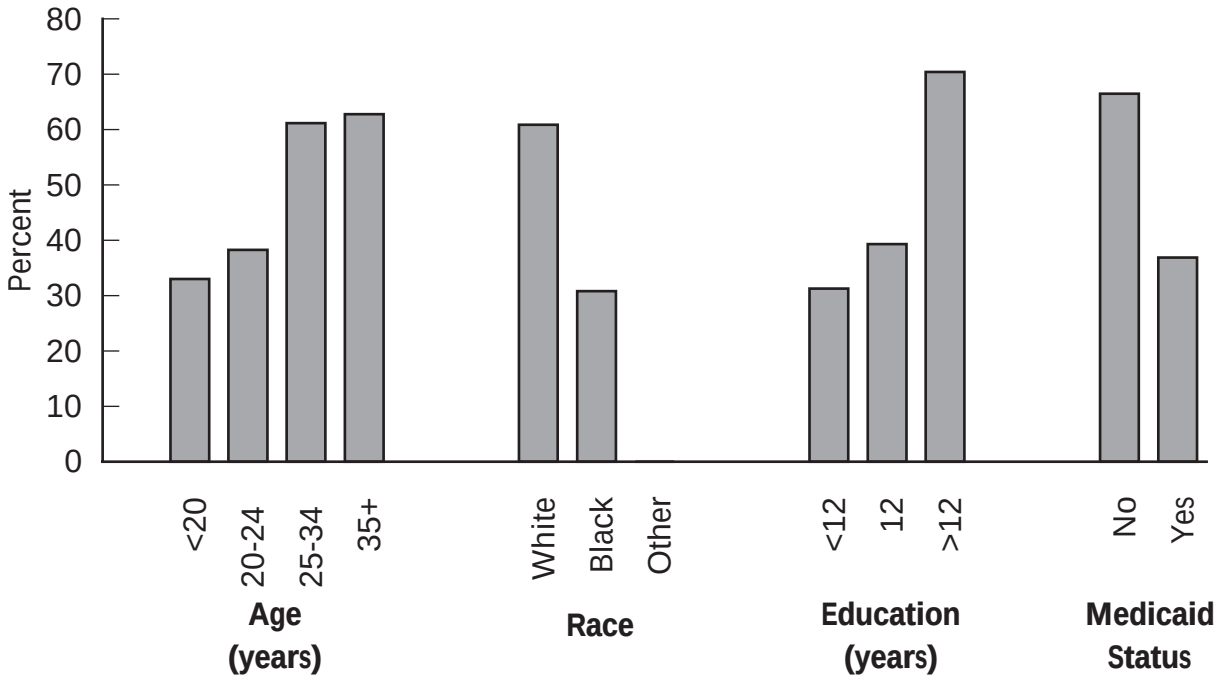


SOUTH CAROLINA 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	366	33.0	3.7	25.9–40.2
20–24	496	38.3	3.0	32.4–44.1
25–34	845	61.2	2.2	56.9–65.6
35+	157	62.8	5.1	52.8–72.8
Race				
White	1,072	60.9	1.9	57.2–64.6
Black	772	30.8	2.6	25.7–35.8
Other†	20	—	—	—
Education, years				
<12	384	31.3	3.4	24.6–38.0
12	732	39.3	2.6	34.3–44.3
>12	677	70.4	2.2	66.0–74.8
Medicaid recipient				
No	758	66.5	2.2	62.2–70.7
Yes	1,106	36.9	2.1	32.8–41.0

*Confidence interval. †30 respondents or less, not reported.

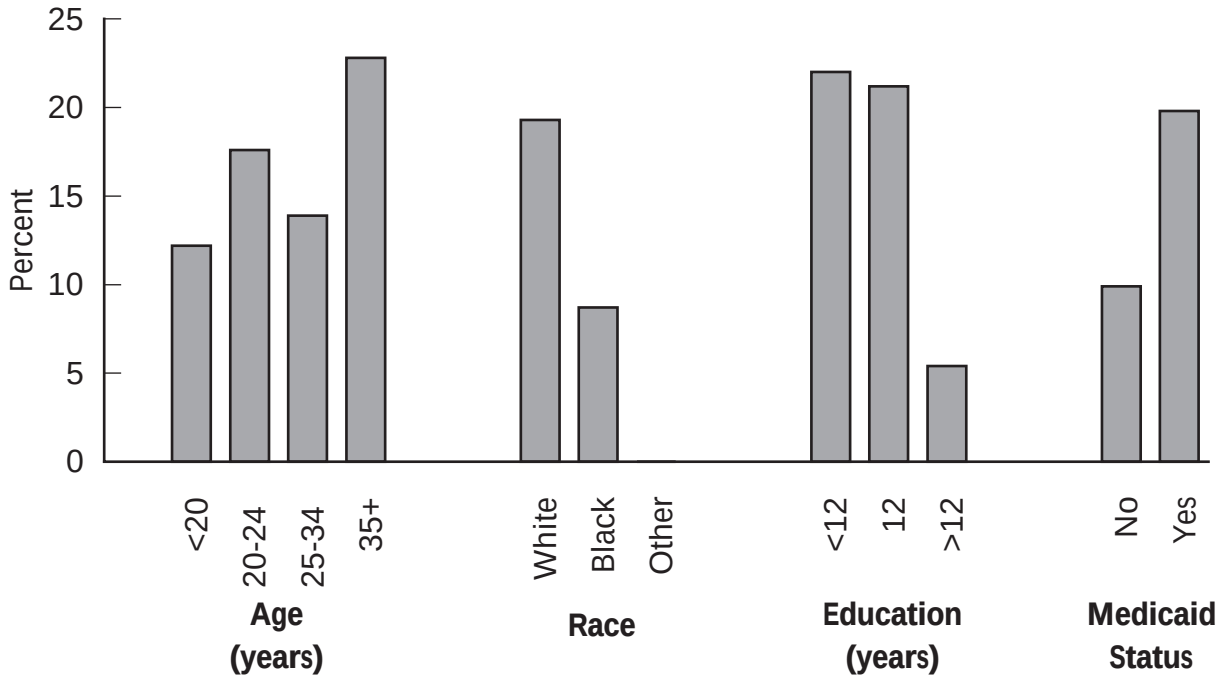


SOUTH CAROLINA 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	407	12.2	2.4	7.4–17.0
20–24	545	17.6	2.3	13.0–22.2
25–34	934	13.9	1.6	10.8–17.0
35+	169	22.8	4.5	14.0–31.6
Race				
White	1,133	19.3	1.5	16.3–22.3
Black	899	8.7	1.6	5.7–11.7
Other†	23	—	—	—
Education, years				
<12	438	22.0	2.9	16.3–27.8
12	819	21.2	2.1	17.1–25.3
>12	719	5.4	1.1	3.3– 7.6
Medicaid recipient				
No	814	9.9	1.4	7.2–12.6
Yes	1,241	19.8	1.7	16.5–23.2

*Confidence interval. †30 respondents or less, not reported.

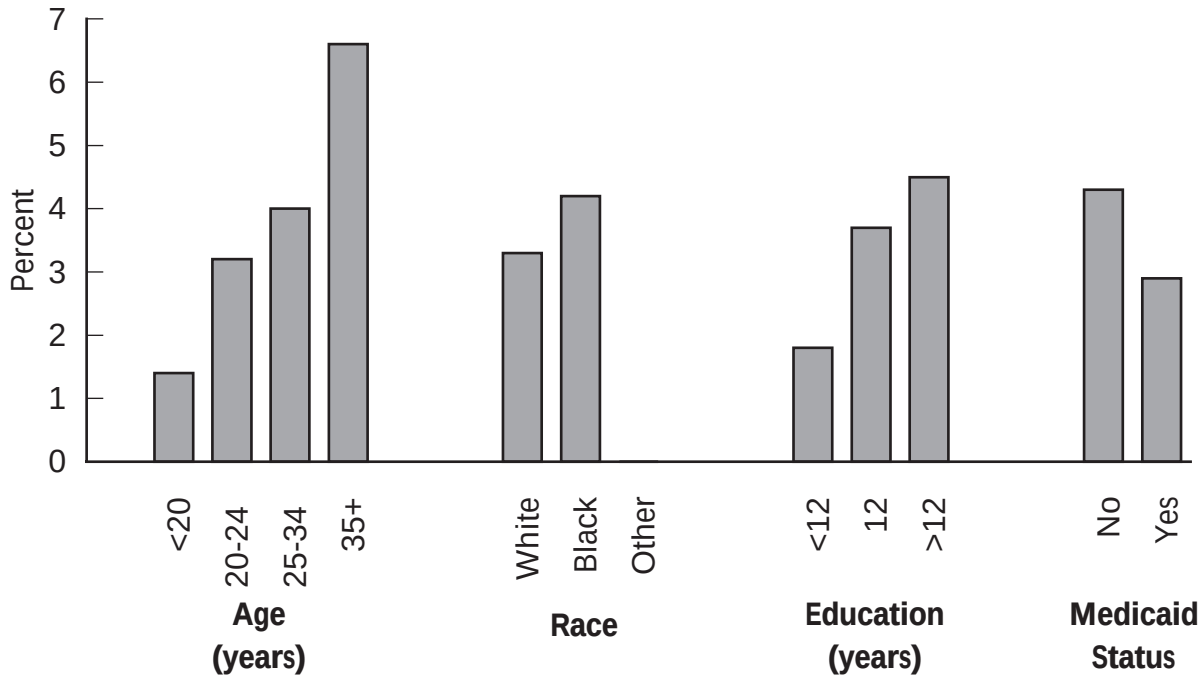


SOUTH CAROLINA 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	407	1.4	0.9	0.0– 3.1
20–24	546	3.2	1.1	0.9– 5.4
25–34	931	4.0	0.8	2.4– 5.7
35+	167	6.6	2.6	1.4–11.7
Race				
White	1,141	3.3	0.7	2.0– 4.5
Black	889	4.2	1.1	2.0– 6.4
Other†	21	—	—	—
Education, years				
<12	438	1.8	0.8	0.2– 3.3
12	820	3.7	1.0	1.8– 5.6
>12	715	4.5	1.0	2.4– 6.5
Medicaid recipient				
No	815	4.3	0.9	2.6– 6.1
Yes	1,236	2.9	0.7	1.5– 4.4

*Confidence interval. †30 respondents or less, not reported.

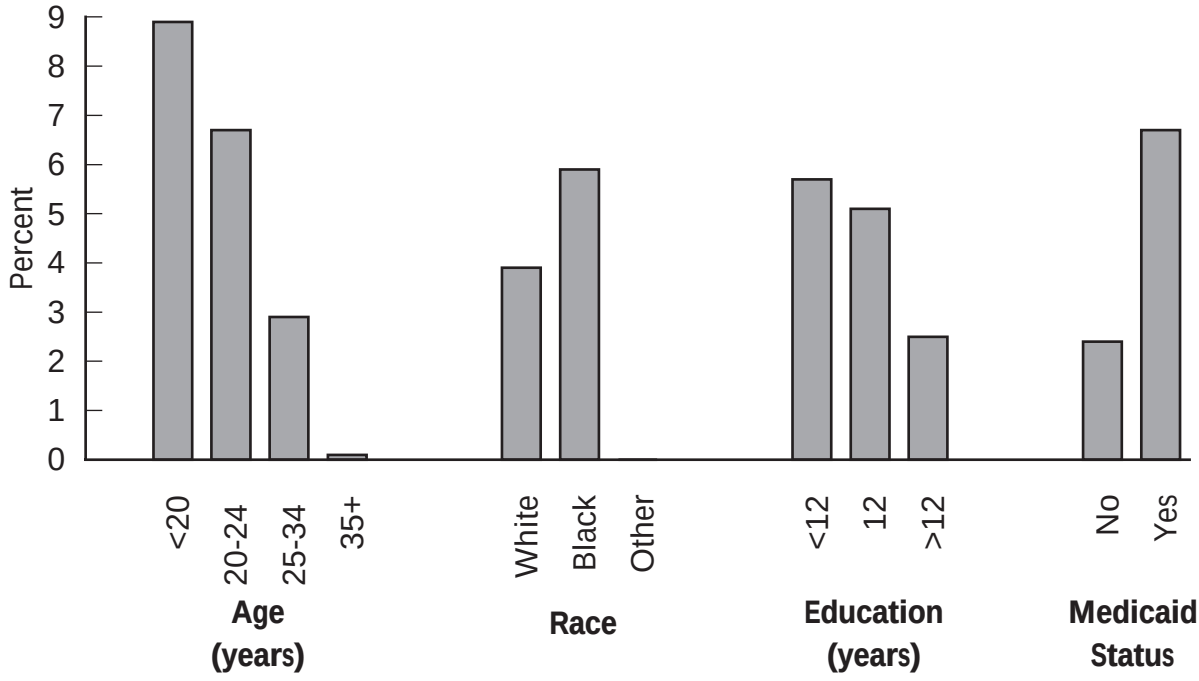


SOUTH CAROLINA 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	409	8.9	2.2	4.7–13.2
20–24	546	6.7	1.5	3.7– 9.6
25–34	926	2.9	0.8	1.4– 4.4
35+	168	0.1	0.0	0.0– 0.2
Race				
White	1,133	3.9	0.8	2.5– 5.4
Black	893	5.9	1.3	3.4– 8.4
Other†	23	—	—	—
Education, years				
<12	439	5.7	1.6	2.6– 8.7
12	819	5.1	1.1	3.0– 7.3
>12	714	2.5	0.8	1.0– 4.1
Medicaid recipient				
No	808	2.4	0.7	0.9– 3.8
Yes	1,241	6.7	1.1	4.6– 8.7

*Confidence interval. †30 respondents or less, not reported.

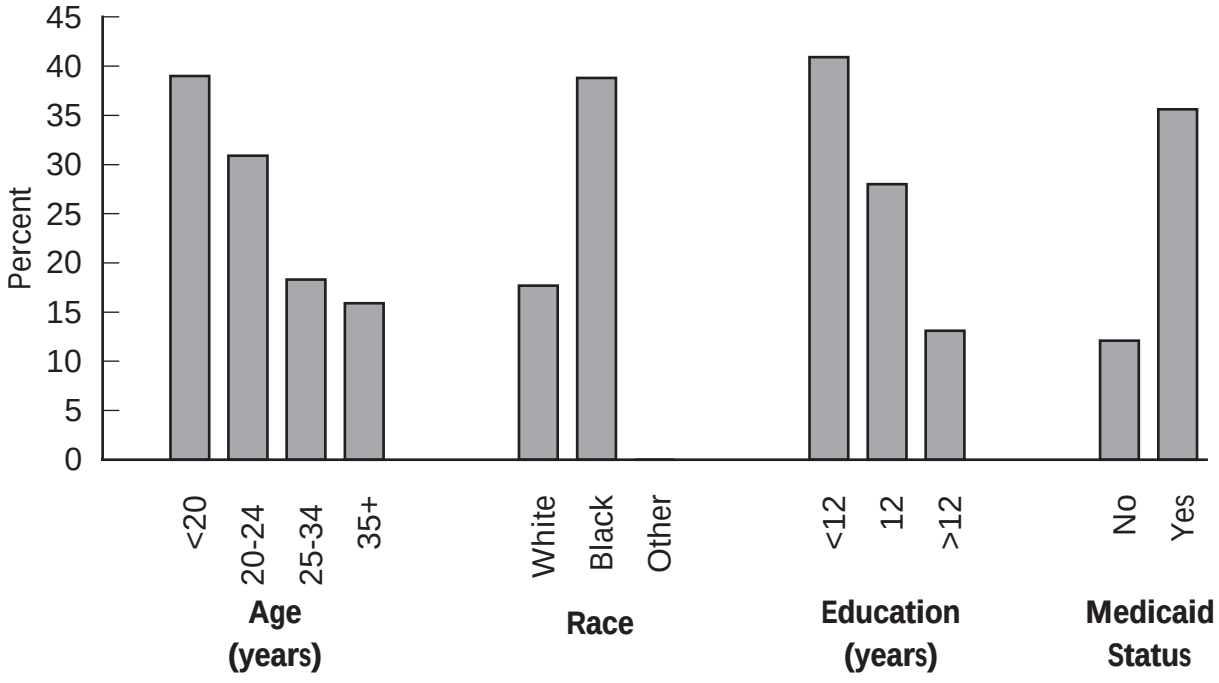


SOUTH CAROLINA 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	407	39.0	3.7	31.8–46.1
20–24	539	30.9	2.9	25.2–36.5
25–34	927	18.3	1.8	14.8–21.9
35+	169	15.9	3.9	8.3–23.5
Race				
White	1,135	17.7	1.5	14.7–20.6
Black	884	38.8	2.7	33.6–44.0
Other†	23	—	—	—
Education, years				
<12	438	40.9	3.5	34.0–47.7
12	807	28.0	2.4	23.4–32.7
>12	717	13.1	1.7	9.8–16.4
Medicaid recipient				
No	804	12.1	1.6	9.0–15.2
Yes	1,238	35.6	2.0	31.5–39.6

*Confidence interval. †30 respondents or less, not reported.



State Exhibits

WASHINGTON

PRAMS 1996 Surveillance Report

WASHINGTON 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		11.3		
20–24		23.7		
25–34		51.8		
35+		13.2		
Race				
White		86.6		
Black		4.0		
Other‡		9.4		
Hispanic ethnicity				
Yes		12.1		
No		87.9		
Education, years				
<12		18.4		
12		32.1		
>12		49.4		
Marital status				
Married		72.5		
Unmarried		27.5		
Birth weight				
LBW (<2500 g)		5.5		
NBW (≥2500 g)		94.5		
Annual household income				
<$16,799	967	36.6	1.6	33.5–39.8
$16,800–$26,399	334	18.5	1.4	15.8–21.3
$26,400–$35,999	224	12.3	1.2	10.0–14.6
>$36,000	486	32.5	1.7	29.2–35.7
In crowded household (>1 person/room)	2,007	11.3	0.9	9.6–13.1

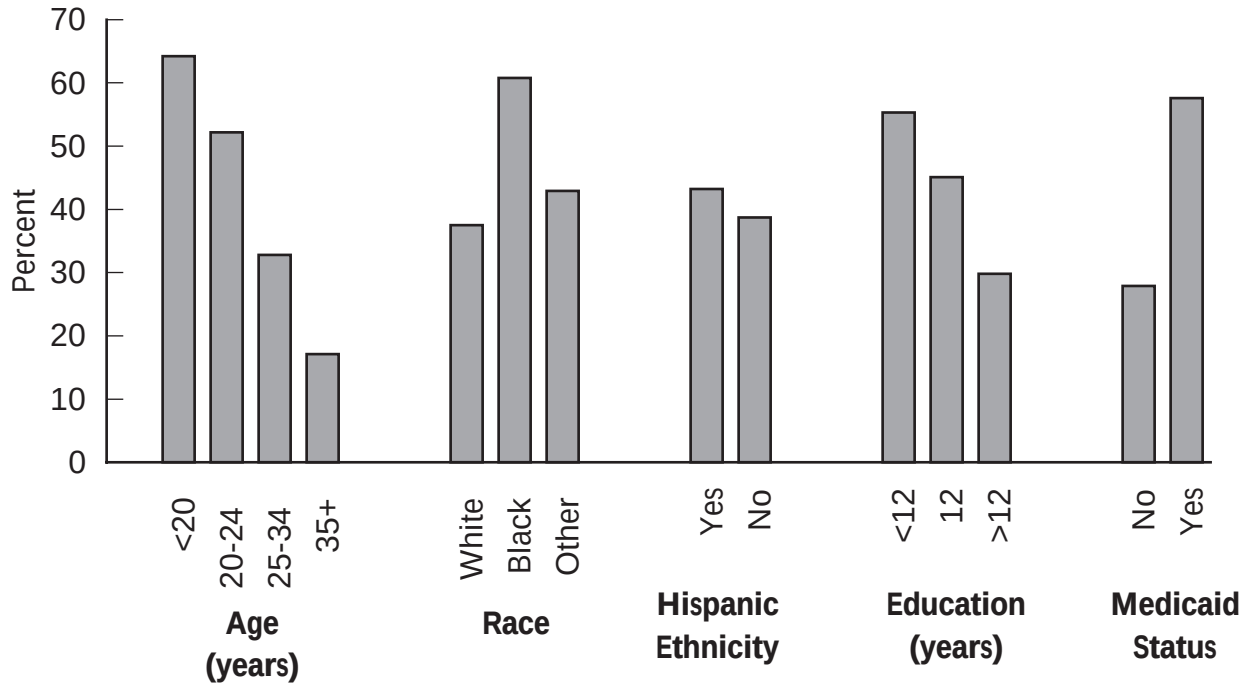
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American (2.4%) and Asian (6.9%).
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

WASHINGTON 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	278	64.2	5.1	54.3–74.1
20–24	479	52.2	3.9	44.6–59.8
25–34	1,000	32.8	2.2	28.4–37.1
35+	218	17.1	3.3	10.5–23.6
Race				
White	812	37.5	2.0	33.6–41.4
Black	323	60.8	2.6	55.6–65.9
Other	813	42.9	1.9	39.1–46.7
Ethnicity				
Hispanic	356	43.2	2.6	38.1-48.3
Non-Hispanic	1,589	38.7	1.9	34.8-42.5
Education, years				
<12	416	55.3	4.2	47.2–63.4
12	561	45.1	3.4	38.4–51.7
>12	794	29.8	2.3	25.2–34.4
Medicaid recipient				
No	1,000	27.9	2.0	24.0–31.9
Yes	976	57.6	2.7	52.3–62.9

*Confidence interval.

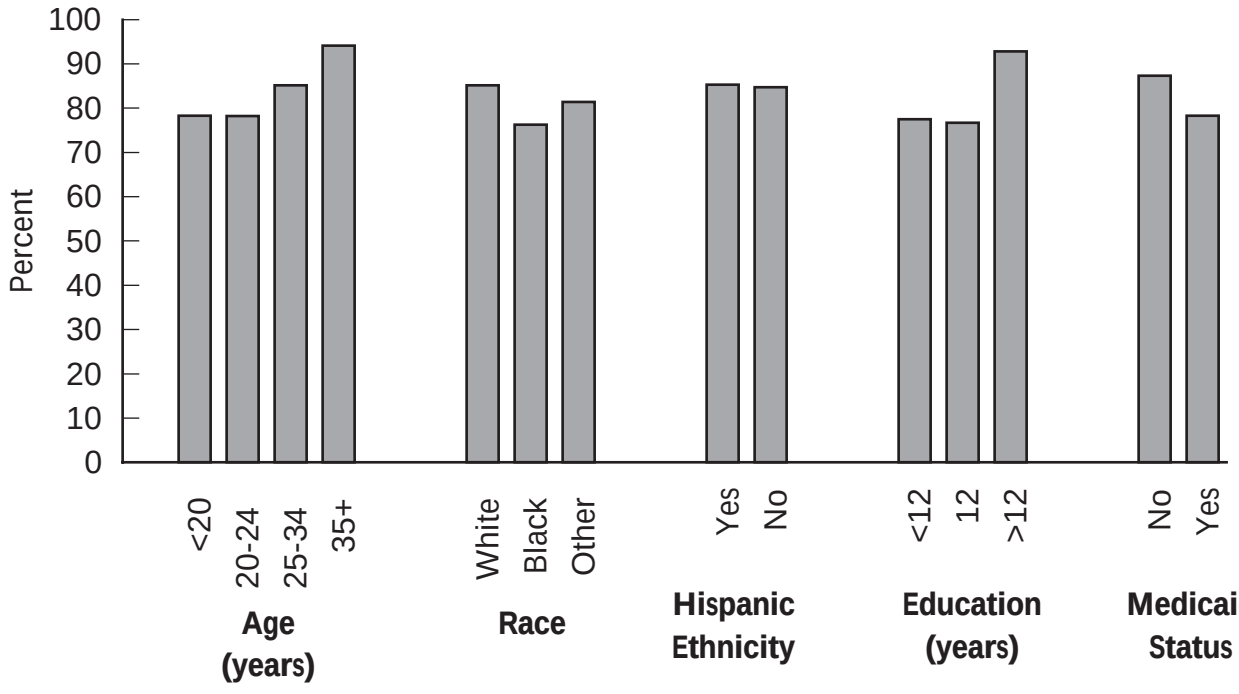


WASHINGTON 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	295	78.3	4.3	69.8–86.7
20–24	506	78.2	3.3	71.8–84.6
25–34	1,021	85.2	1.7	81.9–88.5
35+	238	94.1	1.8	90.6–97.6
Race				
White	838	85.2	1.5	82.4–88.1
Black	333	76.3	2.3	71.8–80.8
Other	862	81.4	1.5	78.5–84.4
Ethnicity				
Hispanic	365	85.3	1.8	81.7-88.9
Non-Hispanic	1,664	84.7	1.4	81.9-87.5
Education, years				
<12	442	77.5	3.7	70.3–84.7
12	588	76.7	2.9	71.1–82.3
>12	823	92.8	1.2	90.4–95.2
Medicaid recipient				
No	1,034	87.3	1.5	84.3–90.2
Yes	1,027	78.3	2.3	73.7–83.0

*Confidence interval.

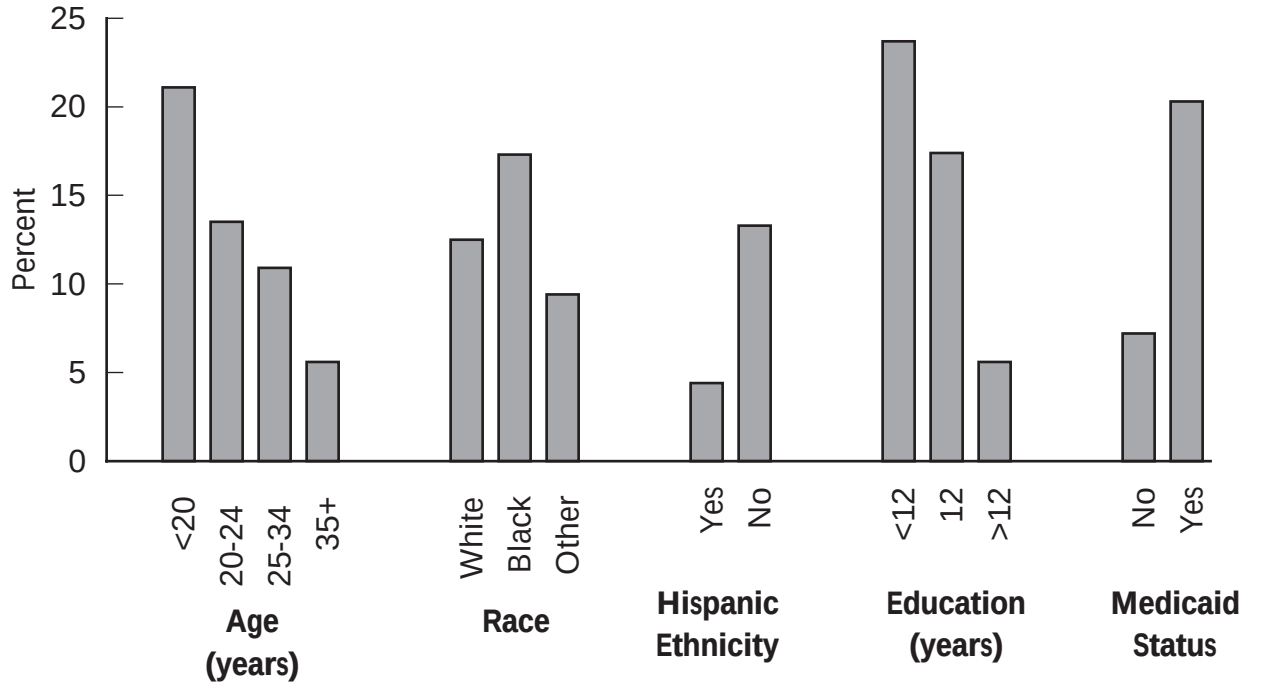


WASHINGTON 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	305	21.1	4.5	12.4–29.9
20–24	515	13.5	2.8	7.9–19.0
25–34	1,046	10.9	1.5	7.9–13.9
35+	241	5.6	2.1	1.5– 9.6
Race				
White	854	12.5	1.4	9.7–15.2
Black	343	17.3	2.1	13.1–21.5
Other	882	9.4	0.9	7.7–11.2
Ethnicity				
Hispanic	376	4.4	1.1	2.3- 6.4
Non-Hispanic	1,700	13.3	1.4	10.6-16.1
Education, years				
<12	456	23.7	3.9	16.0–31.4
12	598	17.4	2.7	12.2–22.7
>12	839	5.6	1.2	3.2– 7.9
Medicaid recipient				
No	1,054	7.2	1.2	4.8– 9.6
Yes	1,054	20.3	2.4	15.7–25.0

*Confidence interval.

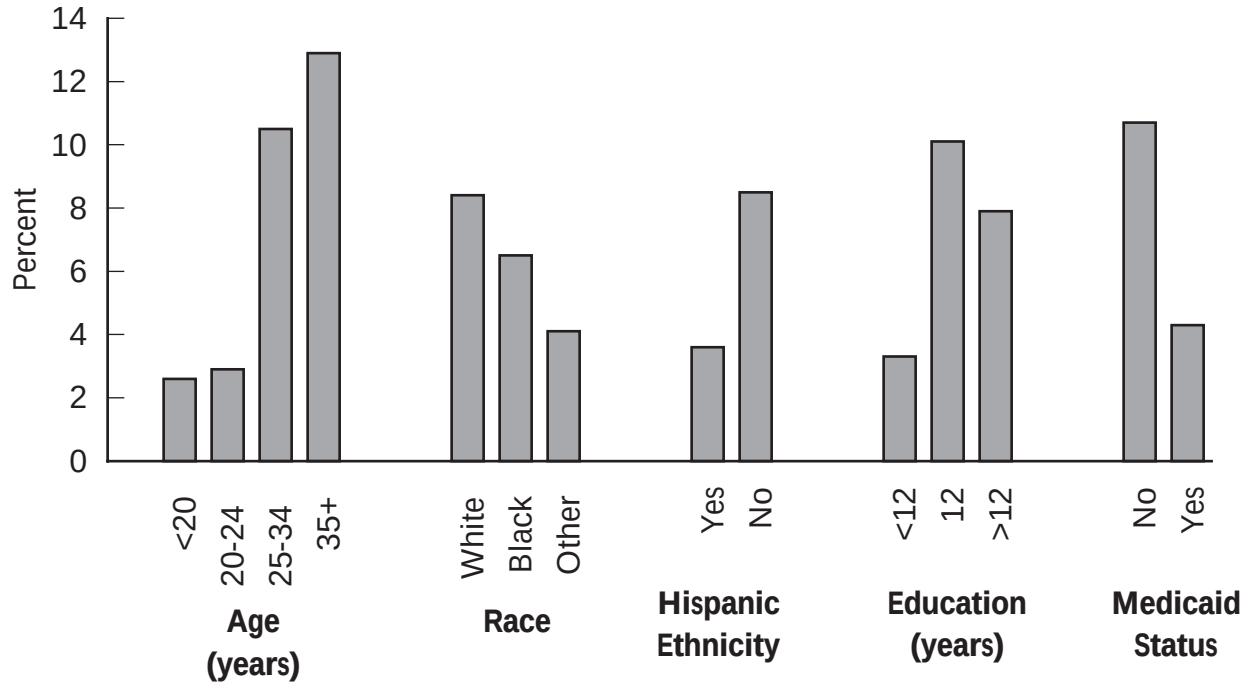


WASHINGTON 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	304	2.6	1.7	0.0– 5.9
20–24	512	2.9	1.1	0.6– 5.1
25–34	1,046	10.5	1.5	7.6–13.4
35+	242	12.9	3.4	6.2–19.5
Race				
White	848	8.4	1.1	6.2–10.7
Black	344	6.5	1.3	4.0– 8.9
Other	884	4.1	0.7	2.7– 5.5
Ethnicity				
Hispanic	368	3.6	1.0	1.7- 5.5
Non-Hispanic	1,705	8.5	1.1	6.4-10.7
Education, years				
<12	449	3.3	1.5	0.4– 6.3
12	603	10.1	2.1	5.9–14.2
>12	835	7.9	1.4	5.2–10.7
Medicaid recipient				
No	1,052	10.7	1.4	7.9–13.4
Yes	1,053	4.3	1.1	2.1– 6.4

*Confidence interval.

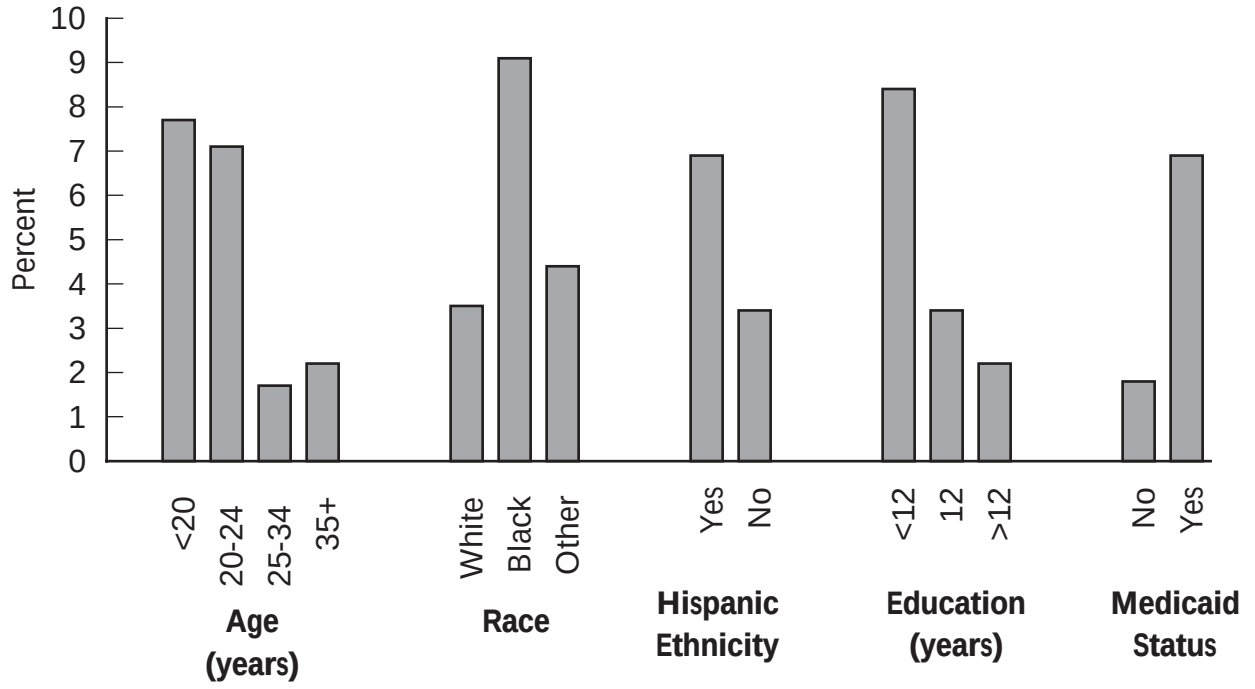


WASHINGTON 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	229	7.7	3.4	1.0–14.4
20–24	385	7.1	1.8	3.6–10.6
25–34	765	1.7	0.6	0.5– 2.9
35+	186	2.2	1.5	0.0– 5.1
Race				
White	624	3.5	0.8	1.9– 5.1
Black	254	9.1	1.7	5.7–12.5
Other	666	4.4	0.8	2.9– 5.9
Ethnicity				
Hispanic	265	6.9	1.6	3.9-10.0
Non-Hispanic	1,274	3.4	0.8	1.8- 5.0
Education, years				
<12	331	8.4	2.8	3.0–13.9
12	439	3.4	1.1	1.2– 5.7
>12	629	2.2	0.8	0.6– 3.7
Medicaid recipient				
No	796	1.8	0.6	0.6– 3.1
Yes	769	6.9	1.6	3.8–10.0

*Confidence interval.

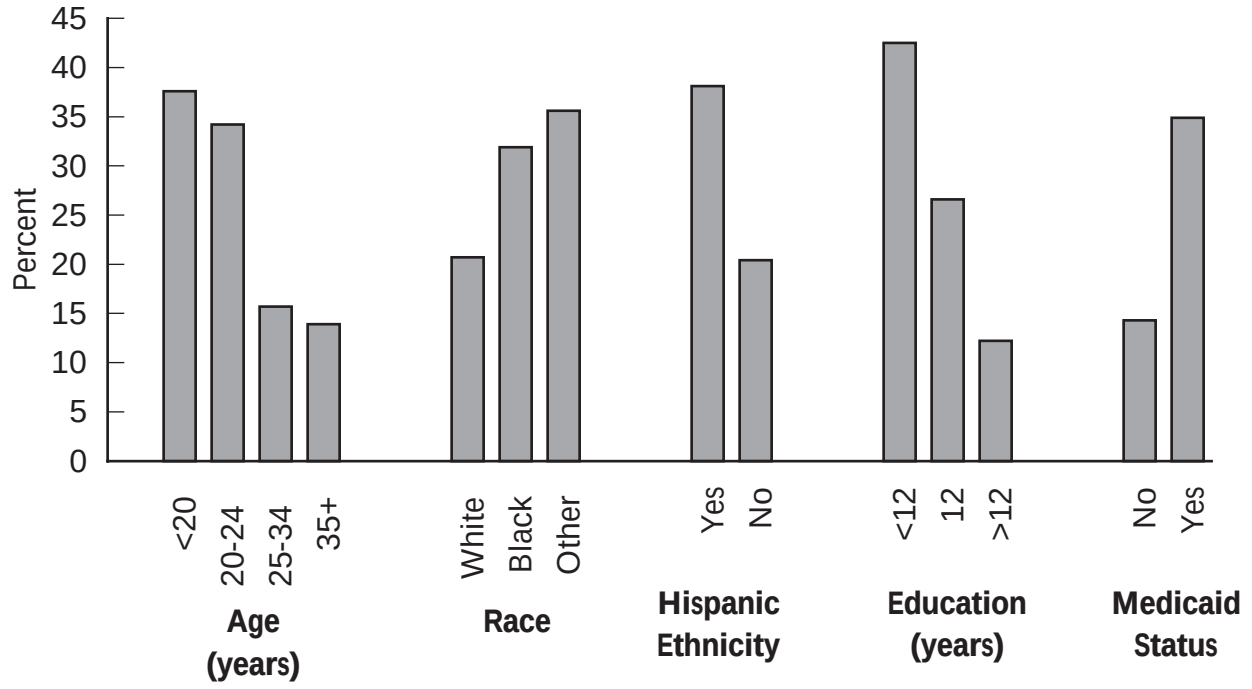


WASHINGTON 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	298	37.6	4.8	28.1–47.1
20–24	506	34.2	3.5	27.3–41.1
25–34	1,045	15.7	1.5	12.7–18.7
35+	239	13.9	3.0	7.9–19.8
Race				
White	844	20.7	1.6	17.6–23.8
Black	340	31.9	2.6	26.8–36.9
Other	876	35.6	1.8	32.0–39.2
Ethnicity				
Hispanic	371	38.1	2.5	33.2-42.9
Non-Hispanic	1,686	20.4	1.5	17.4-23.4
Education, years				
<12	446	42.5	4.0	34.7–50.4
12	596	26.6	2.9	21.0–32.2
>12	832	12.2	1.6	9.1–15.3
Medicaid recipient				
No	1,046	14.3	1.5	11.3–17.2
Yes	1,043	34.9	2.5	30.0–39.8

*Confidence interval.



State Exhibits

WEST VIRGINIA

PRAMS 1996 Surveillance Report

WEST VIRGINIA 1996
Characteristics of PRAMS-Eligible Population*

Characteristic	Sample Size	Percent	Standard Error	95% CI†
Age, years				
<20		17.4		
20–24		32.8		
25–34		42.6		
35+		7.2		
Race				
White		95.5		
Black		3.8		
Other‡		0.8		
Hispanic ethnicity				
Yes		0.6		
No		99.4		
Education, years				
<12		22.5		
12		42.7		
>12		34.7		
Marital status				
Married		67.7		
Unmarried		32.3		
Birth weight				
LBW (<2500 g)		8.0		
NBW (≥2500 g)		92.0		
Annual household income				
<$17,000	778	47.1	1.9	43.4–50.7
$17,001–$19,000	144	9.7	1.1	7.5–11.9
$19,001–$25,000	171	12.9	1.3	10.3–15.4
>$25,000	402	30.3	1.7	27.0–33.7
In crowded household (>1 person/room)	1,465	6.7	1.0	4.8– 8.5

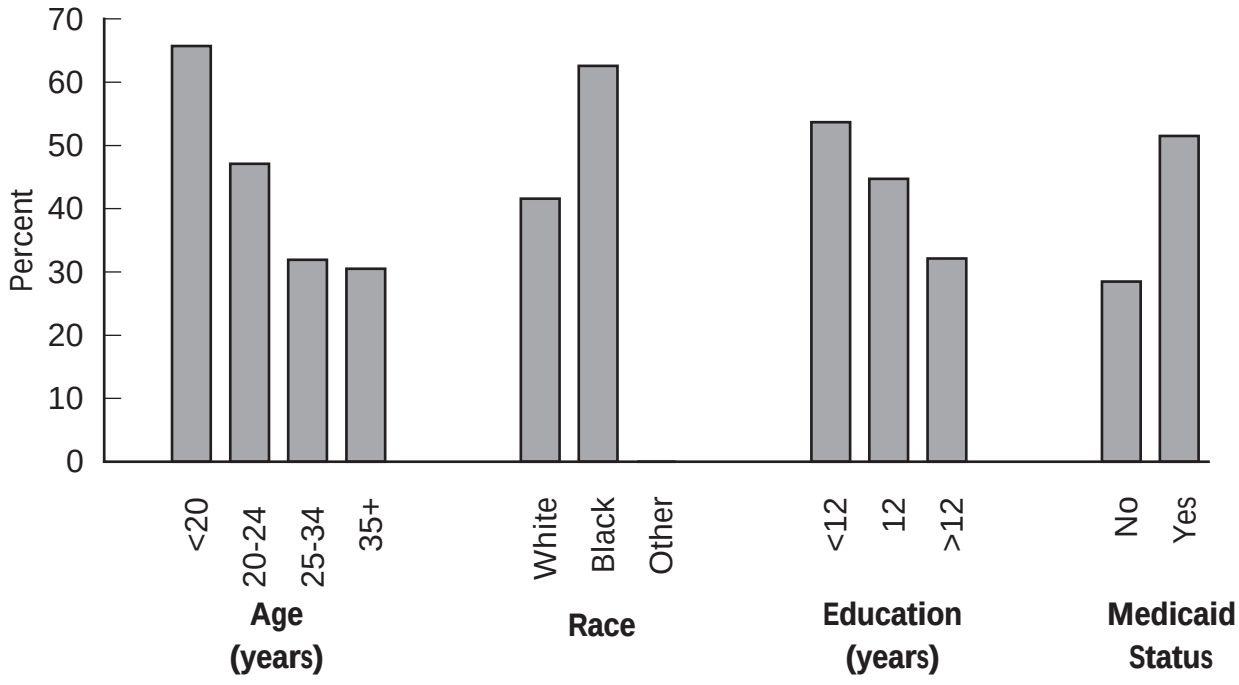
*PRAMS-eligible population is defined as state residents who had in-state births.
†Confidence interval.
‡Other includes Native American and Asian.
Sources: Figures for "Annual household income" and "In crowded household" are estimated from the PRAMS sample; all other figures are population percentages compiled from state birth certificate data.

WEST VIRGINIA 1996
Prevalence of Unintended Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	270	65.7	4.4	57.0–74.4
20–24	437	47.1	3.4	40.4–53.8
25–34	584	31.9	2.8	26.4–37.3
35+	119	30.5	6.4	18.0–43.1
Race				
White	1,354	41.6	1.9	37.9–45.4
Black	48	62.6	11.4	40.2–85.1
Other†	8	—	—	—
Education, years				
<12	338	53.7	4.5	45.0–62.5
12	592	44.7	2.9	39.0–50.4
>12	475	32.1	2.9	26.4–37.8
Medicaid recipient				
No	533	28.5	2.7	23.1–33.8
Yes	877	51.5	2.5	46.6–56.4

*Confidence interval. †30 respondents or less, not reported.

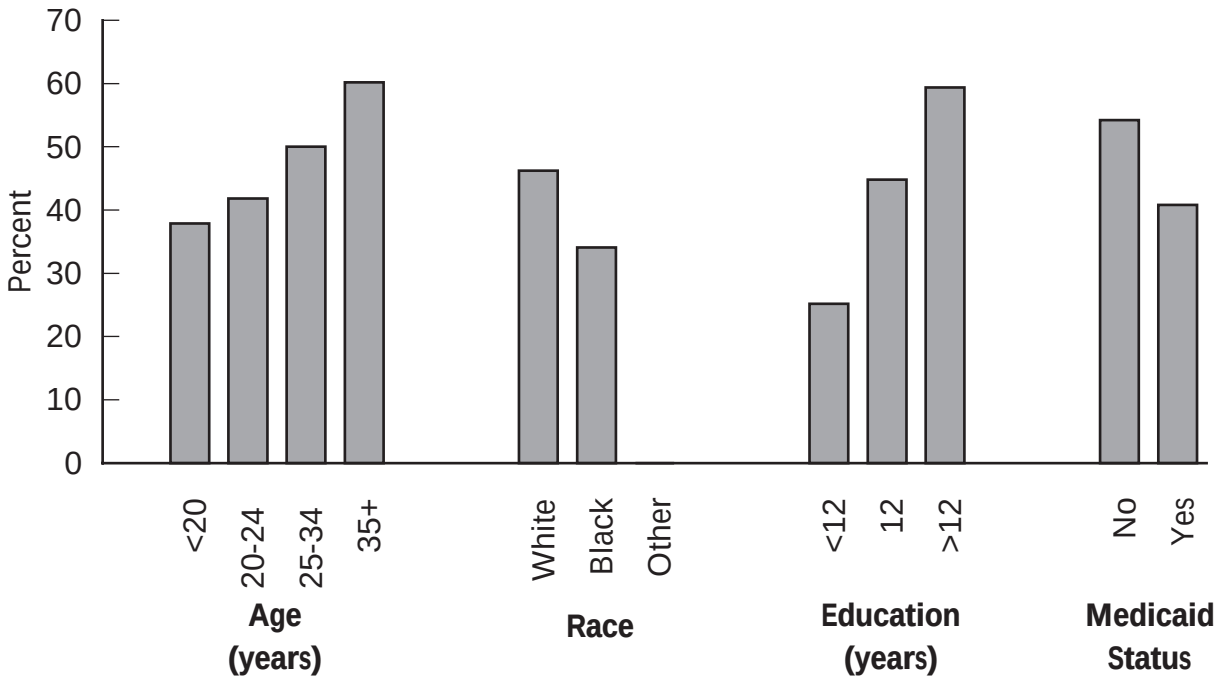


WEST VIRGINIA 1996
Prevalence of Ever Breast-Feeding

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	271	37.9	4.5	29.1–46.7
20–24	458	41.8	3.3	35.3–48.2
25–34	601	50.0	2.9	44.3–55.7
35+	121	60.2	6.8	46.9–73.4
Race				
White	1,388	46.2	1.9	42.4–50.0
Black	54	34.1	10.1	14.3–53.8
Other†	9	—	—	—
Education, years				
<12	349	25.2	3.8	17.8–32.6
12	615	44.8	2.9	39.2–50.4
>12	482	59.4	3.1	53.4–65.4
Medicaid recipient				
No	543	54.2	3.0	48.3–60.1
Yes	908	40.8	2.4	36.0–45.5

*Confidence interval. †30 respondents or less, not reported.

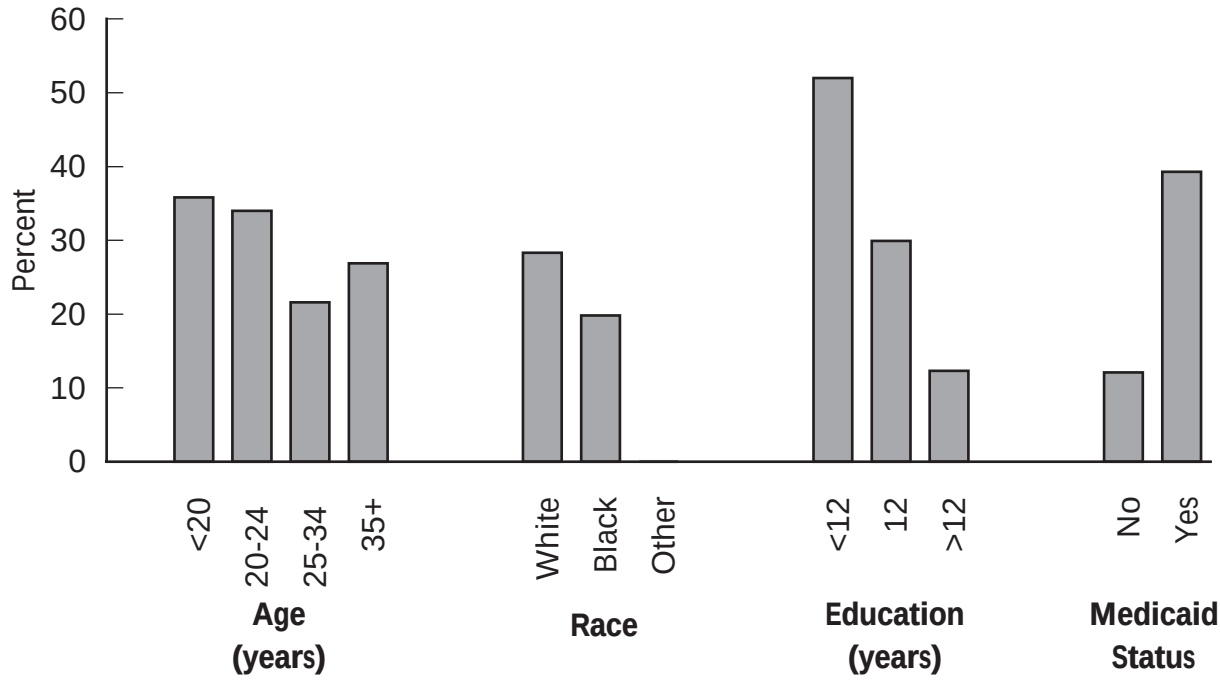


WEST VIRGINIA 1996
Prevalence of Smoking During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	275	35.8	4.4	27.3–44.3
20–24	446	34.0	3.2	27.7–40.3
25–34	609	21.6	2.3	17.1–26.2
35+	127	26.9	6.2	14.7–39.1
Race				
White	1397	28.3	1.7	25.0–31.7
Black	51	19.8	9.5	1.2–38.4
Other†	9	—	—	—
Education, years				
<12	363	52.0	4.3	43.6–60.5
12	606	29.9	2.6	24.7–35.1
>12	483	12.3	2.0	8.4–16.1
Medicaid recipient				
No	542	12.1	1.9	8.4–15.7
Yes	915	39.3	2.4	34.5–44.0

*Confidence interval. †30 respondents or less, not reported.

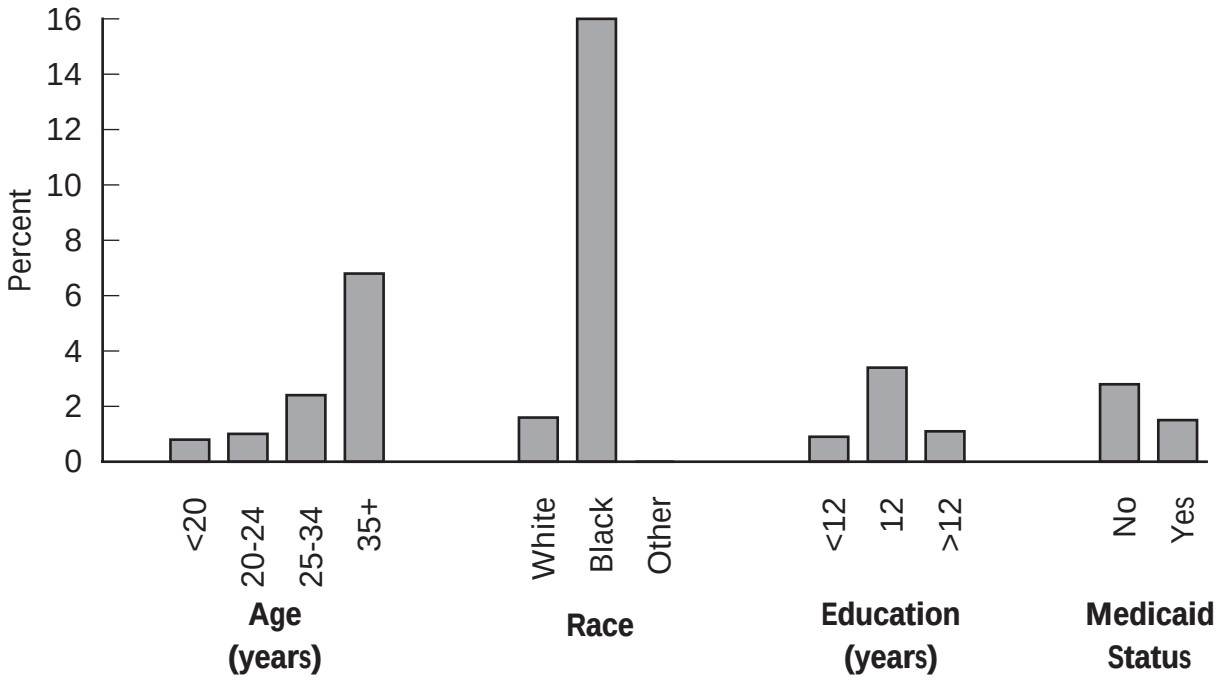


WEST VIRGINIA 1996
Prevalence of Drinking Alcohol During the Last Three Months of Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	289	0.8	0.7	0.0– 2.1
20–24	460	1.0	0.6	0.0– 2.1
25–34	608	2.4	0.9	0.7– 4.1
35+	128	6.8	4.0	0.0–14.6
Race				
White	1423	1.6	0.5	0.7– 2.5
Black	53	16.0	9.5	0.0–34.7
Other†	9	—	—	—
Education, years				
<12	373	0.9	0.5	0.0– 1.9
12	621	3.4	1.1	1.2– 5.6
>12	486	1.1	0.6	0.0– 2.2
Medicaid recipient				
No	544	2.8	1.0	0.8– 4.8
Yes	941	1.5	0.6	0.4– 2.6

*Confidence interval. †30 respondents or less, not reported.

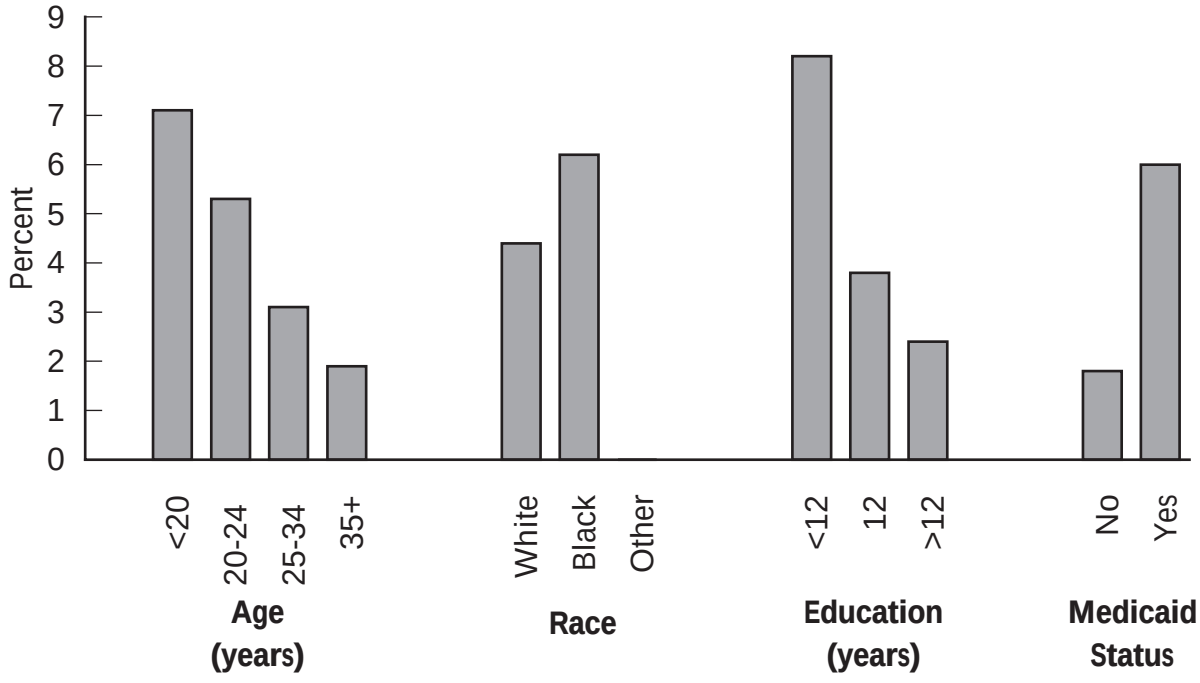


WEST VIRGINIA 1996
Prevalence of Being Physically Hurt by Husband or Partner During Pregnancy

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	287	7.1	2.5	2.3–12.0
20–24	462	5.3	1.4	2.7– 8.0
25–34	611	3.1	0.9	1.4– 4.8
35+	129	1.9	1.4	0.0– 4.7
Race				
White	1,423	4.4	0.7	2.9– 5.8
Black	57	6.2	5.1	0.0–16.2
Other†	9	—	—	—
Education, years				
<12	375	8.2	2.2	3.9–12.6
12	624	3.8	0.9	1.9– 5.6
>12	485	2.4	0.9	0.7– 4.1
Medicaid recipient				
No	541	1.8	0.7	0.4– 3.2
Yes	948	6.0	1.1	3.9– 8.2

*Confidence interval. †30 respondents or less, not reported.

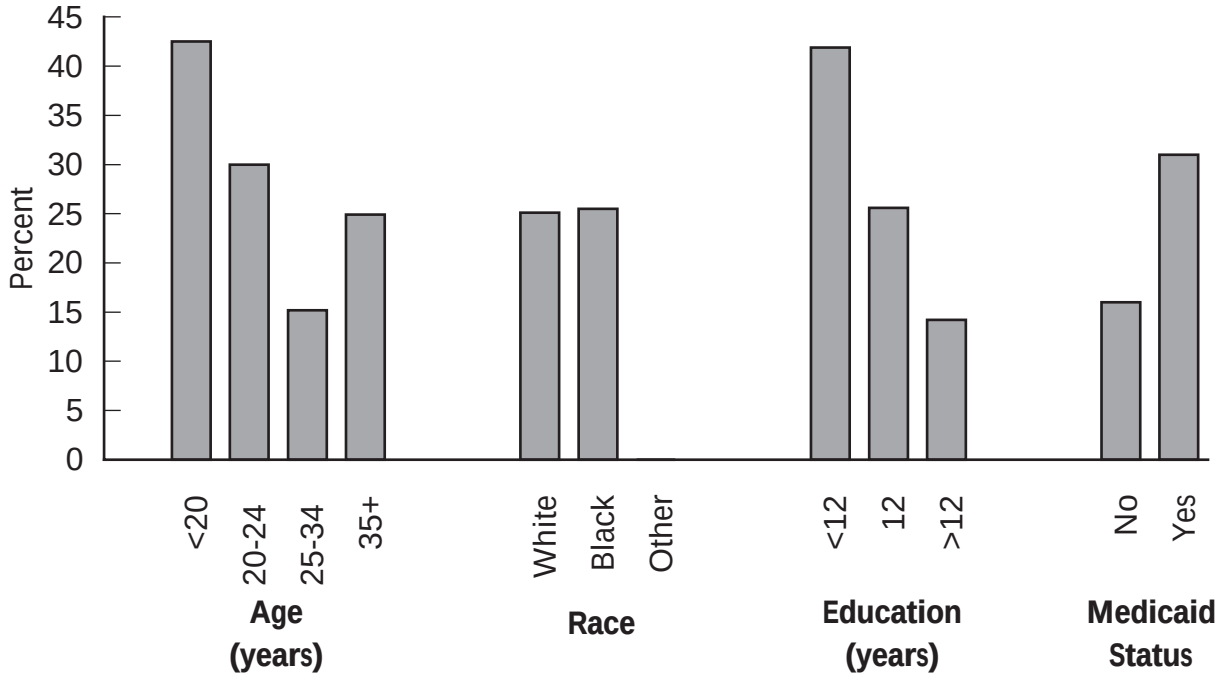


WEST VIRGINIA 1996
Prevalence of Entry into Prenatal Care After the First Trimester

By Select Sociodemographic Characteristics

Characteristic	Sample Size	Percent	Standard Error	95% CI*
Age, years				
<20	288	42.5	4.4	34.0–51.0
20–24	471	30.0	2.9	24.3–35.7
25–34	622	15.2	1.9	11.4–19.0
35+	129	24.9	5.8	13.6–36.3
Race				
White	1,444	25.1	1.5	22.1–28.1
Black	57	25.5	8.0	9.7–41.3
Other†	9	—	—	—
Education, years				
<12	377	41.9	4.1	33.8–49.9
12	634	25.6	2.3	21.2–30.1
>12	494	14.2	2.1	10.1–18.2
Medicaid recipient				
No	551	16.0	2.2	11.8–20.2
Yes	959	31.0	2.1	27.0–35.1

*Confidence interval. †30 respondents or less, not reported.



Appendixes

APPENDIX A

Detailed PRAMS Methodology

PRAMS Data Collection Methodology

One of the strengths of the PRAMS surveillance system is the standardized data collection methodology that each participating state uses. This standardized approach allows for comparisons among states and for optimal use of the data for single-state or multistate analysis. The standardized data collection methodology is described in the CDC Model Surveillance Protocol.[1] Each state follows this basic methodology but also has the opportunity to customize some portions of it to tailor the procedures to match the needs of the state. For example, the basic methodology calls for two mailings of the questionnaire packet. States have the option of adopting an additional third mailing.

PRAMS is a mixed-mode surveillance system that combines two modes of data collection. The primary data collection method is by a mailed questionnaire, and multiple attempts are made by mail and then by telephone to follow up with nonrespondents. The principles and practices of mail/telephone survey methodology used by CDC are based primarily on the research of Don Dilman.[2,3] A key aspect of his approach is to make numerous and varied contacts with sampled mothers. The sequence of contacts for PRAMS surveillance is as follows:

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

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

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

4. **Second Mail Questionnaire Packet.** This packet is sent to all sampled mothers who have not yet responded 7 to 14 days after the tickler has been sent.

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

6. **Telephone Follow-up.** Telephone follow-up is initiated for all nonrespondents 7 to 14 days after mailing the last questionnaire (except in Alaska).

The series of mailings commences two to four months after delivery. The questionnaire contains items asking about the early postpartum period; thus, the mailings are timed to ensure that all women can respond for this period. The data collection cycle from the mailing of the preletter to the close of telephone follow-up lasts approximately 60–70 days. Each month, a stratified sample is drawn from the current birth certificate file. For each of these monthly samples, or "batches," this sequence of contacts is attempted. To assist in tracking all aspects of data collection, CDC developed and installed a customized tracking system, PRAMTrac, in

each state. PRAMTrac is designed to assist with scheduling mailings and telephone calls, preparing letters, and tracking responses. The median month of response after delivery for states using the mail/telephone methodology typically ranges from the third to the fifth month.

The mail packets contain the following:.

- A multipurpose cover letter that describes PRAMS, explains how and why the mother was chosen, elicits the mother's cooperation, describes procedures for filling out and returning the questionnaire, explains any incentive or reward, and provides a telephone number for additional information. This letter is modified slightly for the second and third mailings, primarily by adding an additional appeal for response.

- The questionnaire booklet. Each state's questionnaire booklet is 14 pages long, has a colorful cover designed by the state, is slightly smaller than an 8.5"x11" sheet of paper, and contains an extra page for comments from the mother. A stamped, self-addressed return envelope is provided.

- A question-and-answer brochure providing additional information and answers to the most frequently asked questions about PRAMS. It can be an important tool to convince the mother to participate.

- A calendar to be used as a memory aid for answering the questions.

- Some type of participation incentive (sent to all sampled mothers) or reward (sent to all respondents). Examples include coupons for certified birth certificates, participation in a raffle for a cash award, postage stamps, bibs, cash (a dollar bill), and magnetic picture frames.

Telephone follow-up begins after the last questionnaire is mailed. Various sources of telephone numbers, which vary by state, are used to obtain valid numbers. Calls to a particular number are staggered over different times of the day and different days of the week. The calling period for a batch is from two to three weeks. Up to 15 attempts are made to contact a mother. Often, telephone interviewers arrange call-back interviews to accommodate the schedule of the mother.

Some states found that the population of minority women living in urban areas yielded some of the lowest response rates. To reach this population, a hospital-based data collection methodology was developed to serve as a supplement to the basic mail/telephone methodology. In hospital-based supplementation, a PRAMS representative in the hospital contacts women who have given birth shortly after delivery. An incentive, such baby booties, bibs, and baby care packages, is used to encourage participation. The woman completes the self-administered questionnaire, which is a modified version of that used in mail surveillance. It contains only the questions that pertain to the period preceding the birth of the baby and is referred to as "Part I." Part II of the questionnaire contains questions about events that occurred after delivery and is mailed to the mother 60 days after she leaves the hospital. Nonrespondents are followed up by telephone using the same techniques used in the mail/telephone methodology. California and the District of Columbia used this methodology for their entire sample; four other states adopted it as a supplement to their mail/telephone methodology. During

1996, Georgia, New York, and Michigan used hospital-based surveillance as a supplement to the standard mail/telephone methodology. Georgia and New York discontinued hospital surveillance in June 1996. These 6-month samples represent 2.5% of the population in Georgia and 0.8% in New York. Michigan continued hospital-based surveillance throughout 1996; their hospital sample represents 8.6% of the population.

The PRAMS Questionnaire

The original PRAMS questionnaire was developed in 1987, with the help of numerous individuals within and outside CDC. An extensive list of topics was identified and researched. From this list, questions were developed and tested before being placed on the questionnaire.

Participating states used this Phase 1 questionnaire from fall 1988 through 1989. After an evaluation of the Phase 1 questionnaire, CDC and the participating PRAMS states developed the Phase 2 questionnaire and put it in the field in 1990. Although the questionnaire maintained its original structure, selected questions were revised, some were deleted, and new questions were added. In 1994, CDC collaborated with the participating PRAMS states to develop a Phase 3 questionnaire. Again, the original structure was maintained, but several questions were revised, deleted, or added. In fall 1995, states began to use the Phase 3 questionnaire.

The questionnaire consists of two parts, a core portion that is the same for all states and a state-specific portion tailored to each state's needs. Topics addressed in the PRAMS core questionnaire include barriers to and content of prenatal care, obstetric history, maternal use of alcohol and cigarettes, nutrition, economic status, maternal stress, and early infant development and health status. The 24 indicators used in this report are found in the core portion of the Phase 3 questionnaire. For the state-specific portion, states can develop and test their own questions, or they can select from a series of 48 questions on 17 topics that have already been developed and tested by CDC. These questions, referred to as standard questions, were developed during the revision process for Phase 3. They reflect additional topics that were of interest to states.

In addition to the questionnaire created for the mail packet, a telephone version of the core and state-specific questions has also been developed for use during the telephone phase. The interviewer-administered questionnaire includes the same content as the self-administered version; however, some questions have been reformatted to facilitate reading them aloud to the mother. Some states with a sizable Hispanic population also use a Spanish questionnaire for mail and telephone contact.

Documentation of Use of Data from Phase 2 and Phase 3

During the Phase 3 revision of the PRAMS questionnaire, several questions from the Phase 2 questionnaire were modified. In some cases, the wording of the question was changed only slightly. For a few questions, however, the changes from Phase 2 to Phase 3 were substantial. Additionally, for Phase 3 several new questions were developed that were not available in Phase 2. The Phase 3 Questionnaire was implemented across states between November 1995 and July 1996. As a result of this implementation schedule, the data for 1996 contains Phase 2 and Phase 3 data for some states. Data from nine of the

eleven states contain 97% or more data from Phase 3. Data for 1996 from Alaska and Washington contain 79% and 75% Phase 3 data, respectively. Data for 1993–1995 all represent Phase 2 data except for a small portion of data from Maine, South Carolina, and West Virginia for 1995 that represents Phase 3. (See Appendix A of the 1995 Surveillance Report for additional details.) The complete Phase 3 questionnaire can be found in Appendix D.

The following seven indicators were computed from Phase 3 data only for this report: husband/partner did not want the pregnancy, sleep position, counseled on HIV prevention, HIV testing discussed, physical abuse before pregnancy, physical abuse during pregnancy, and use of birth control among women with an unintended pregnancy. These represent new indicators or a modified indicator from the 1995 report; since no Phase 2 data are available for these indicators, they are not included in our trend analyses.

PRAMS Weighting Process

Each participating state draws a stratified systematic sample of 100–250 new mothers every month from a frame of eligible birth certificates. Most states oversample low-weight births. Many states stratify by mother's race or ethnicity as well. Annual sample sizes range from 1,700 to 3,400, divided among three to six strata. Typically, the annual sample is large enough for estimating statewide risk factor proportions within 3.5% (95% confidence interval). Estimated proportions within strata are slightly less precise; typically, they are estimated within 5% (95% confidence interval).

Mothers' responses are linked to extracted birth certificate data for analysis. Thus, the PRAMS data set also contains a wealth of demographic and medical information collected through the state's vital records system. The availability of this information for all births is the basis for drawing stratified samples and, ultimately, for generalizing results to the state's entire population of births. Its availability for all sampled women, whether they responded or not, is key to deriving nonresponse weights.

For each respondent, the initial sampling weight is the reciprocal of the sampling fraction applied to the stratum. Sampling fractions in PRAMS range from 1 in 1 for very low birthweight strata in small states to about 1 in 211 for normal birth weight, nonminority strata in populous states. Corresponding sampling weights, thus, would range from 1 to 211.

Nonresponse adjustment factors attempt to compensate for the tendency of women having certain characteristics (such as being unmarried or having less education) to respond at lower rates than do women without those characteristics. Where multivariate analysis shows that these characteristics affected the propensity to respond in a particular stratum, the adjustment factor is the ratio of the sample size in that category to the number of respondents in the category. If analysis shows that no characteristic distinguishes respondents from nonrespondents, the adjustment factor is the ratio of the sample size in that stratum to the number of respondents in the stratum. In the first case, each category so identified has an adjustment factor; in the second, there is a single factor for the whole stratum.

The rationale for applying nonresponse weights is the assumption that nonrespondents would have provided similar answers, on average, to respondents' answers for that stratum and adjustment category. To

ensure that cells with few respondents are not distorted by a few women's answers, small categories are collapsed until each cell contains at least 25 respondents. The magnitude of the adjustment for nonresponse depends on the response rate for a category. If 80% (4/5) of the women in a category respond, the nonresponse weight is 1.25 (5/4). Categories with lower response rates have higher nonresponse weights.

The frame noncoverage weights were derived by comparing frame files for a year of births with the calendar year birth tape that states provided to CDC. Omitted records are usually due to late processing and are evenly scattered across the state, but sometimes they are clustered by particular hospitals or counties or even times of the year. The effect of the noncoverage weights is to bring totals estimated from sample data in line with known totals from the birth tape. In mail/telephone surveillance, the magnitude of noncoverage is small (typically from 1% to 5%), so the adjustment factor for noncoverage is not much greater than 1. We carried out such a frame omission study to look for problems that occurred during frame construction in all states except Oklahoma, for which we did not have a calendar year birth tape.

Multiplying together the sampling, nonresponse, and noncoverage components of the weight yields the analysis weight. This weight can be interpreted as the number of women in the population who have characteristics similar to those of the respondent. All weighted results in this report were produced with SUDAAN (software for survey data analysis),[4] developed by the Research Triangle Institute. SUDAAN is used for analyzing PRAMS data because it accounts for the complex sampling designs that states employ. It uses first-order Taylor series approximations to calculate appropriate standard errors for the estimates it produces.

References

1. Centers for Disease Control and Prevention. PRAMS model surveillance protocol, 1996. Unpublished.
2. Dillman DA. Mail and telephone surveys: the total design method. New York: John Wiley & Sons, 1978.
3. Salant PA, Dillman DA. How to conduct your own survey: leading professionals give you proven techniques for getting reliable results. New York: John Wiley & Sons, 1994.
4. Shah BV, Barnwell BG, Bieler GS. SUDAAN user's manual: software for analysis of correlated data. Release 6.40. Research Triangle Park, NC: Research Triangle Institute, 1995.

APPENDIX B

States' Strata, Sample Sizes, and Response Rates, 1996

State	Stratification Variables	Sample Size	Response Rate (%)
Alabama	Birthweight (<2500g, ≥2500 g); Medicaid status (yes, no)	2,513	75
Alaska	Birthweight (<2500g, ≥2500 g); Alaska Native/nonnative status	1,824	73
Florida	Birthweight (<2500g, ≥2500 g); Race (black, nonblack)	2,490	80
Georgia*	Birthweight (<2500g ≥2500 g); Race (black, nonblack)	2,360	76
Maine	Birthweight (<2500g, ≥2500 g)	1,489	80
Michigan*	Birthweight (<2500g ≥2500 g); Race (black, nonblack)	2,260	72
New York*†	Birthweight (<2500g, ≥2500 g)	1,921	72
Oklahoma	Birthweight (≤1500, 1500–2500g, 2500–4000g, >4000g)	2,555	80
South Carolina	Birthweight (<2500g, ≥2500 g); region of state	2,877	73
Washington	Race (Hispanic, black, Asian/Pacific Islander, Native American, white/ unknown/other)	3,022	71
West Virginia	Birthweight (<2500g, ≥2500 g); Adequacy of prenatal care (adequate, intermediate/ inadequate)§	2,041	76

*Sample sizes for states that conducted hospital surveillance during 1996 include all women who gave birth during the chosen sampling period and thus should have been sampled. These sample sizes were used as the denominators of the response rates.
†Data do not include New York City.
§Adequacy of prenatal care was defined using a modified Kessner index. For care to be considered adequate, the woman must have received a specified number of visits depending on gestational age (for pregnancies of 36 of more weeks' duration, at least 9 visits), and the first must have occurred within the first trimester. Care that did not begin during the first trimester or did not include enough visits (depending again on gestational age) would be considered inadequate. Other combinations would constitute an intermediate level of care.

APPENDIX C

Indicators: PRAMS Core Question Number, Definitions, and Related Year 2000 and MCHB Performance Measures

Core Question	Indicator and Definition	Year 2000 Objective	MCHB Performance Measure
5	**Unintended pregnancy** Wanted to be pregnant later or did not want to be pregnant then or at any time in the future just before becoming pregnant.	5.2	
5	**Mistimed pregnancy** Wanted to be pregnant later just before becoming pregnant.	5.2	
5	**Unwanted pregnancy** Did not want to be pregnant then or in the future just before becoming pregnant.	5.2	
30h	**Husband or partner did not want pregnancy** Husband or partner said he did not want mother to be pregnant.	—	
8	**Birth control use among unintended pregnancies** Was mother or husband/partner using any kind of birth control when mother became pregnant?	—	
10	**Late entry into prenatal care** Received no prenatal care or started care after 13 weeks.	14.11	18
11	**Did not get prenatal care as soon as wanted** Received no prenatal care or started care after 13 weeks and did not get it as early as wanted.	—	

APPENDIX C (continued)

Core Question	Indicator and Definition	Year 2000 Objective	MCHB Performance Measure
4	**Not sure of pregnancy status** Was not sure of pregnancy until after 13 weeks.	—	
15	**Medicaid coverage of prenatal care** Medicaid paid for prenatal care.	—	
17	**WIC coverage of prenatal care** Participated in WIC during pregnancy.	—	
42	**Never breast-fed** Did not breast-feed at any time.	14.9	
42	**Breast-feeding at one month** Breast-fed at least one month or was still breast-feeding at time of survey.	14.9	9
22	**Smoking before pregnancy** Smoked during the three months before pregnancy.	3.4h	
23	**Smoking during pregnancy** Smoked during the last three months of pregnancy.	3.4i	
24	**Smoking after pregnancy** Was smoking at the time of survey.	3.7	
25	**Drinking before pregnancy** Drank alcohol during the three months before pregnancy.	—	
26	**Drinking during pregnancy** Drank alcohol during the last three months of pregnancy.	14.10	

APPENDIX C (continued)

Core Question	Indicator and Definition	Year 2000 Objective	MCHB Performance Measure
37	**Hospital stay one night or less** Stayed in the hospital one night or less for delivery.	—	
31	**Infant placed in an intensive care unit** Infant was placed in an intensive care unit after delivery.	14.14	
45	**Infant sleep position on back** Infant was put to sleep mainly on back.	—	
45	**Infant sleep position on side** Infant was put to sleep mainly on side.	—	
16k	**Counseled on HIV prevention during prenatal care** Counseled by health care worker about HIV prevention during prenatal care.	—	
16l	**Counseled on HIV testing during prenatal care** Health care worker discussed HIV testing during prenatal care.	—	
31	**Physically abused by husband or partner during the 12 months before pregnancy** Was physically abused by husband or partner during the 12 months before pregnancy.	7.5	
32	**Physically abused by husband or partner during the most recent pregnancy** Was physically abused by husband or partner during the most recent pregnancy.	—	

APPENDIX D

PRAMS Phase 3 Core Questionnaire

First, we would like to ask you a few questions about the time before your new baby was born. Please check the box next to the best answer.

1. Before your new baby, did you ever have any other babies who were born alive?
   - ❒ No —> **Go to Question 4**
   - ❒ Yes

2. Did the baby just before your new one weigh 5 pounds, 8 ounces ***or less*** at birth?
   - ❒ No
   - ❒ Yes

3. Was the baby just before your new one born ***more*** than 3 weeks before its due date?
   - ❒ No
   - ❒ Yes

Next are some questions about the time just before and during your pregnancy with your new baby. It may help to look at the calendar when you answer these questions.

4. 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

5. Thinking back to ***just before*** you got pregnant, how did you feel about becoming pregnant? **Check the best 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
   - ❒ I don't know

6. ***Just before*** you got pregnant, did you have health insurance? **Don't count Medicaid.**
   - ❒ No
   - ❒ Yes

7. ***Just before*** you got pregnant, were you on Medicaid?
   - ❒ No
   - ❒ Yes

8. When you got pregnant with your new baby, were you or your husband or partner using any kind of birth control?
Birth control means the pill, condoms, diaphragm, foam, rhythm, Norplant®, shots (Depo-Provera®), or ANY other way to keep from getting pregnant.

- ❒ No
- ❒ Yes —> **Go to Question 10**

9. Why were you or your husband or partner not using any birth control?
Check all that apply.

- ❒ I wanted to get pregnant
- ❒ I didn't think I could get pregnant
- ❒ I had been having side effects from the birth control I used
- ❒ I didn't want to use birth control
- ❒ I didn't think I was going to have sex
- ❒ My husband or partner didn't want to use birth control
- ❒ Other —> Please tell us:
  _____

The next questions are about the prenatal care you got 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 check-ups and advice about pregnancy. It may help to look at a calendar when you answer these questions.

10. How many weeks or months pregnant were you when you had your first visit for prenatal care?
Don't count a visit that was only for a pregnancy test or only for WIC (Women, Infants, and Children's Nutrition Program).

____ Weeks or ____ Months

- ❒ I did not go for prenatal care

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

- ❒ No
- ❒ Yes —> **Go to Question 13**
- ❒ I did not want prenatal care —> **Go to Question 13**

12. Did any of these things keep you from getting prenatal care as early as you wanted?
Check all that apply.

- ❒ I couldn't get an appointment earlier in my pregnancy
- ❒ I didn't have enough money or insurance to pay for my visits
- ❒ I didn't know that I was pregnant
- ❒ I had no way to get to the clinic or doctor's office
- ❒ I couldn't find a doctor or a nurse who would take me as a patient
- ❒ I had no one to take care of my children
- ❒ I had too many other things going on
- ❒ Other —> Please tell us:

_____

If you did not go for prenatal care, go to Question 17 on Page 4.

13. During each month of your pregnancy, about how many visits for prenatal care did you have?
If you don't know exactly how many, please give us your best guess. Don't count visits for WIC. It may help to use the calendar.

Month of pregnancy	How many visits?
First month	_____
Second month	_____
Third month	_____
Fourth month	_____
Fifth month	_____
Sixth month	_____
Seventh month	_____
Eighth month	_____
Ninth month	_____

- ❒ I did not go for prenatal care —> **Go to Question 17**

14. Where did you go ***most of the time*** for your prenatal visits?
Don't include visits for WIC.
Check one answer.

- ❒ Hospital clinic
- ❒ Health department clinic
- ❒ Private doctor's office
- ❒
- ❒
- ❒ Other —> Please tell us:

_____

15. How was your prenatal care paid for?
Check all that apply.

- ❒ Medicaid
- ❒ Personal income (cash, check, or credit card)
- ❒ Health insurance
- ❒
- ❒
- ❒ Other —> Please tell us:

_____

16. 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? **For each thing, please circle Y (Yes) if someone talked with you about it or N (No) if no one talked with you about it.**

	No	Yes
a. What you should eat during your pregnancy	N	Y
b. How smoking during pregnancy could affect your baby	N	Y
c. Breast-feeding your baby	N	Y
d. How drinking alcohol during pregnancy could affect your baby	N	Y
e. Using a seat belt during your pregnancy	N	Y
f. Birth control methods to use after your pregnancy	N	Y
g. The kinds of medicines that were safe to take during your pregnancy	N	Y
h. How using illegal drugs could affect your baby	N	Y
i. How your baby grows and develops during your pregnancy	N	Y
j. What to do if your labor starts early	N	Y
k. How to keep from getting HIV (the virus that causes AIDS)	N	Y
l. Getting your blood tested for HIV (the virus that causes AIDS)	N	Y
m. Physical abuse to women by their husbands or partners	N	Y

17. During your pregnancy, were you on WIC?
- ❒ No
- ❒ Yes

18. ***Just before*** you got pregnant, how much did you weigh?
- ____ Pounds
- ❒ I don't know

19. How tall are you without shoes?
____ Feet ____ Inches

20. Have you ever heard or read that taking the vitamin folic acid can help prevent some birth defects?
- ❒ No
- ❒ Yes

The next questions are about smoking cigarettes and drinking alcohol.

21. Have you smoked at least 100 cigarettes in your entire life?

- ❒ No —> **Go to Question 25**
- ❒ Yes

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

____ Cigarettes or ____ Packs

- ❒ Less than 1 cigarette a day
- ❒ I didn't smoke
- ❒ I don't know

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

____ Cigarettes or ____ Packs

- ❒ Less than 1 cigarette a day
- ❒ I didn't smoke
- ❒ I don't know

24. How many cigarettes or packs of cigarettes do you smoke on an average day ***now***?

____ Cigarettes or ____ Packs

- ❒ Less than 1 cigarette a day
- ❒ I don't smoke
- ❒ I don't know

25. a During the ***3 months before*** you got pregnant, how many alcoholic drinks did you have in an average week? (A drink is: One glass of wine. One wine cooler. One can or bottle of beer. One shot of liquor. One mixed drink.)

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

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

____ Times

- ❒ I didn't drink then
- ❒ I don't know

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

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

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

____ Times

- ❒ I didn't drink then
- ❒ I don't know

The next questions are about times you may have had to stay in the hospital while you were pregnant. Please DO NOT COUNT the time you went to the hospital to have your baby.

27. ***Not counting*** the time you went to the hospital to have your baby, how many ***other*** times during your pregnancy did you go into a hospital and stay ***at least one night?***

- ❒ None —> **Go to Question 30**
- ❒ 1 time
- ❒ 2 times
- ❒ 3 times
- ❒ 4 times or more

28. What problems caused you to stay in the hospital?
Check all of the problems that you had.

- ❒ Labor pains more than 3 weeks before my due date (premature labor)
- ❒ High blood pressure (preeclampsia or toxemia)
- ❒ Vaginal bleeding or placenta problems
- ❒ Nausea, vomiting, or dehydration
- ❒ Kidney or bladder infection
- ❒ High blood sugar (diabetes)
- ❒ Other —> Please tell us:

_____

29. How many months pregnant were you the ***first*** time you had to go into a hospital and stay at least one night?

____ Months

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

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

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

The next questions are about physical abuse. Physical abuse means pushing, hitting, slapping, kicking, or any other way of physically hurting someone.

31. During the ***12 months before you got pregnant*** with your new baby, did any of these people physically abuse you? **Check all that apply.**

- ❒ My husband or partner
- ❒ A family or household member ***other than*** my husband or partner
- ❒ A friend
- ❒ Someone else —> Please tell us: _____
- ❒ No one physically abused me during the 12 months before I got pregnant

32. ***During your most recent pregnancy***, did any of these people physically abuse you? **Check all that apply.**

- ❒ My husband or partner
- ❒ A family or household member ***other than*** my husband or partner
- ❒ A friend
- ❒ Someone else —> Please tell us: _____
- ❒ No one physically abused me during my pregnancy —> **Go to Question 34**

33. ***During your most recent pregnancy***, would you say that you were physically abused ***more*** often, ***less*** often, or ***about the same*** compared with the ***12 months before*** you got pregnant?
Check only one.

- ❒ I was physically abused ***more often*** during my pregnancy
- ❒ I was physically abused ***less often*** during my pregnancy
- ❒ I was physically abused ***about the same*** during my pregnancy
- ❒ No one physically abused me during the ***12 months before*** I got pregnant

The next questions are about your labor and delivery.

34. When was your baby due?

_____/_____/_____
month day year

35. When was your baby born?

_____/_____/_____
month day year

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

_____/_____/_____
month day year

- ❒ I did not have my baby in a hospital

37. When you had your baby, how many nights did you stay in the hospital?

____ Nights

- ❒ I did not stay overnight in the hospital
- ❒ I did not have my baby in a hospital

38. When your baby was born, how many nights did he or she stay in the hospital?

____ Nights

- ❒ My baby did not stay overnight in the hospital
- ❒ My baby was not born in a hospital

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

- ❒ No
- ❒ Yes
- ❒ I don't know

40. How was your delivery paid for?
Check all that apply.

- ❒ Medicaid
- ❒ Personal income (cash, check, or credit card)
- ❒ Health insurance
- ❒
- ❒
- ❒ Other —> Please tell us:

_____

41. Is your baby alive now?

- ❒ No —> When did your baby die? _____/_____/_____ month day year
- ❒ Yes —> Is your baby living with you now?
  - ❒ No
  - ❒ Yes

If your baby is not alive or is not living with you now, go to Question 48 on Page 10.

42. For how many weeks did you breast-feed your new baby?

____ Weeks

- ❒ I didn't breast-feed my baby —> **Go to Question 44**
- ❒ I breast-fed less than 1 week —> **Go to Question 44**
- ❒ I'm still breast-feeding

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

____ Weeks

- ❒ My baby was less than 1 week old
- ❒ I haven't fed my baby anything besides breast milk

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

____ Hours

- ❒ My baby is never in the same room with someone who is smoking

45. How do you put your new baby down to sleep ***most*** of the time?
Check one answer.

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

46. How many times has your baby been to a doctor or nurse for ***routine*** well baby care?
Don't count the times you took your baby for care when he or she was sick. It may help to use the calendar.

____ Times

- ❒ My baby hasn't been for routine well baby care —> **Go to Question 48**

47. When your baby goes for ***routine*** well baby care, where do you take him or her?
Check all the places that you use.

- ❒ Hospital clinic
- ❒ Health department clinic
- ❒ Private doctor's office
- ❒
- ❒
- ❒ Other —> Please tell us:

_____

The next questions are about your family and the place where you live.

48. Which rooms are in the house, apartment, or trailer where you live?
Check all that you have.

- ❒ Bedrooms —> how many? _____
- ❒ Living room
- ❒ Separate dining room
- ❒ Kitchen
- ❒ Bathroom(s)
- ❒ Recreation room, den, or family room
- ❒ Finished basement

49. How many people live in your house, apartment, or trailer? **Count yourself.**

	How many?
Babies, children, or teens aged 17 years or younger	_____
Adults aged 18 years or older	_____

50. What were the sources of your family income during the past 12 months? **Check all that apply.**

- ❒ Money from a job or business
- ❒ Aid such as TANF (formerly AFDC), welfare, public assistance, general assistance, food stamps, or SSI
- ❒ Unemployment benefits
- ❒ Child support or alimony
- ❒ Fees, rental income, commissions, interest, dividends
- ❒ Social security, workers' compensation, veteran benefits, or pensions
- ❒ Other —> Please tell us:

  _____

51. What is today's date?

_____/_____/_____
month day year

52. What is ***your*** date of birth?

_____/_____/_____
month day year

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

Thanks for answering our questions!

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