# Findings from the Massachusetts Pregnancy Risk Assessment Monitoring System (PRAMS) 2019-2021

Massachusetts Department of Public Health
Bureau of Family Health and Nutrition
Division of Maternal and Child Health Research and Analysis

July 2023
(revised February 2024)

# Findings from the

# Massachusetts PRAMS 2019-2021

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July 2023

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Most importantly, our thanks go to all the parents who completed the 2019-2021 Massachusetts PRAMS surveys which led to this report.

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This publication can be downloaded from the following website:
**https://www.mass.gov/dph/prams**

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The Massachusetts Department of Public Health recognizes that families come in many forms. The PRAMS report is specifically about experiences related to pregnancy and the perinatal period. This report uses gender-neutral language wherever possible, like "pregnant person," “birthing person,” and “respondent,” as not everyone who gives birth identifies as a woman, female, or a mother. We use the term "partner" to talk about another person who is co-parenting with respondents. The term "father" is included in one question written by the CDC and specifically refers to the person whose sperm was involved in conception. MA PRAMS strives to include the voices of all people who experience pregnancy in Massachusetts.

The contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

# Introduction

This report contains data from the 2019-2021 Massachusetts Pregnancy Risk Assessment Monitoring System (MA PRAMS) survey. MA PRAMS is a collaborative surveillance project between the Centers for Disease Control and Prevention (CDC) and the Massachusetts Department of Public Health (MDPH). PRAMS collects state-specific, population-based data on parental attitudes and experiences before, during, and shortly after pregnancy. In addition, PRAMS provides unique data on racism, mental health, family medical leave, disability status, and social supports. MA PRAMS oversamples by race and Hispanic ethnicity to ensure adequate representation of birth parents from racially and ethnically diverse backgrounds and the survey is conducted in English and Spanish. Findings from MA PRAMS survey are used to assess the health of birth parents and infants across the state and to inform program monitoring, maternal and child health research and evaluation, and policy development. PRAMS data are also used to inform the Title V Maternal and Child Health (MCH) needs assessment, measure progress on national and state MCH performance measures, increase visibility of MCH issues, justify and support allocation of resources, and build state data capacity. The Title V program is a federal-state partnership between the Health Resources and Services Administration and state health departments and plays a key role in the provision of MCH services in Massachusetts.

PRAMS is conducted annually with monthly samples collected throughout the year from January to December. As the survey was already in the field when the COVID-19 pandemic began in spring 2020, Massachusetts did not add COVID-related items to the PRAMS questionnaire itself. However, the state began collecting data specific to COVID-19 through a supplemental survey in October 2020. An additional supplement on COVID-19 vaccination was included in 2021, and results from both supplements will be available in fall 2023. Details of CDC PRAMS methodology are available from CDC here.

Data collected through MA PRAMS enable MDPH to provide estimates of a variety of risk factors, preventive behaviors, perinatal conditions, and emerging public health issues for the Massachusetts birthing population by demographic and socioeconomic characteristics (race and Hispanic ethnicity, age, education, federal poverty level, nativity, marital status, and disability status). These analyses highlight inequities in health within and across population sub-groups. In interpreting these results, it is critical to recognize that the social, economic, behavioral, and physical factors experienced by pregnant and postpartum people where they live and work have a profound impact on their health. Disparities in outcomes by race, for example, are much more often due to inequities in social factors and the perpetuation of racial discrimination than biological causes. The social determinants of health (SDoH) are rooted in systems—and therefore— public health action must be directed at systems change to reduce and prevent health inequities.

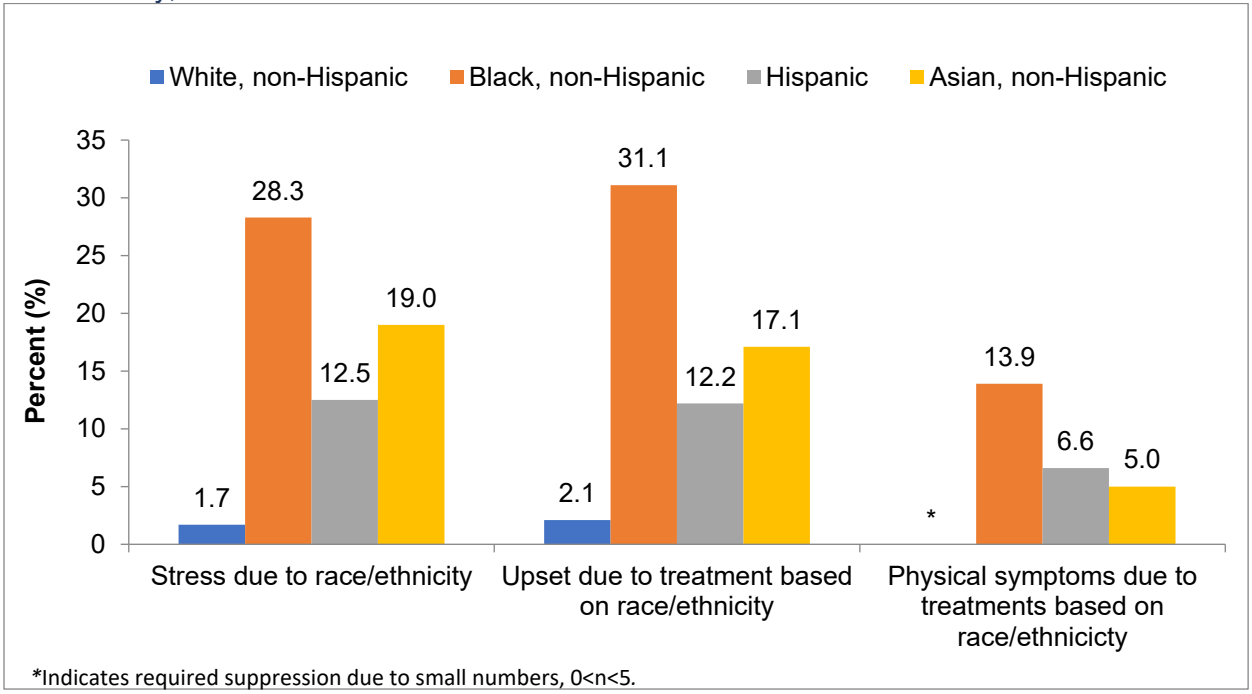
In 2019, MA PRAMS sampled a total of 2,947 birth parents with 1,697 responses. In 2020, a total of 2,492 birth parents were sampled with 1,400 responses and in 2021, a total of 2,501 were sampled with 1,321 responses, resulting in weighted response rates of 61%, 60% and 61% respectively. MA PRAMS has consistently met or exceeded the CDC PRAMS response rate threshold, which was 50% for 2019-2021. For prior PRAMS reports, we have historically combined data over multiple years. However, due to the unprecedented challenges of COVID-19 we have presented this report's data by individual year, with additional data in the Appendix.

# Highlights of the data

## The Impact of Racism on Stress

Massachusetts was the first state to include racism-related questions in its PRAMS survey. This is a significant advancement as other current state and national data systems lack the ability to highlight the drivers of inequity across populations. MA PRAMS data on experiences of racism were used to inform the Special Legislative Commission on Racial Inequities in Maternal Health, created by a legislative act signed by former Governor Charlie Baker in January 2021. MA PRAMS data allow MDPH to understand how the impact of racism, discrimination, and stigma contribute to the adverse outcomes experienced among Black and Brown people and help MDPH take a data-driven approach to address inequities in health outcomes. **In 2021, Black non-Hispanic respondents were more than 16 times as likely to report feeling stressed and more than 14 times as likely to report feeling upset due to treatment based on their racial or ethnic background compared to White non-Hispanic respondents**. Additional data on racism are available here.

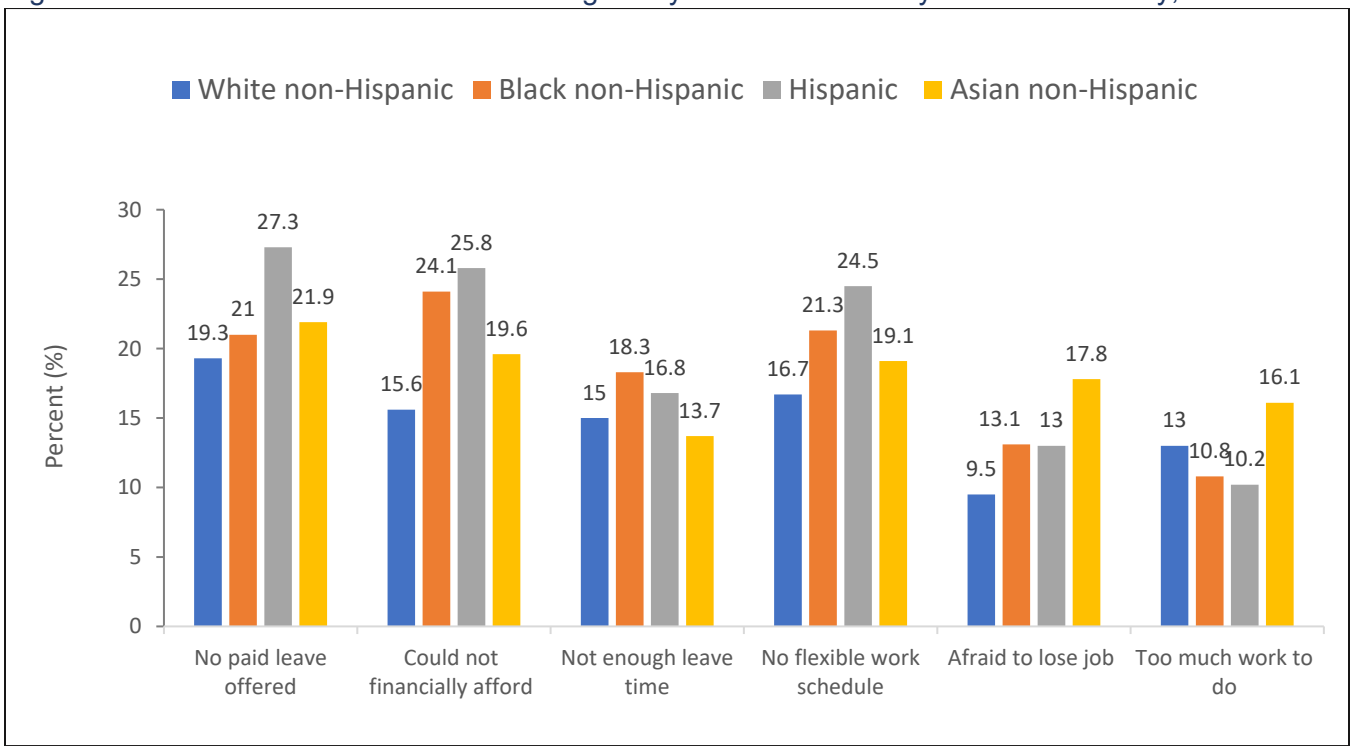
Figure 1. Prevalence of reactions to racism during the twelve months before delivery, by race and ethnicity, 2021.



## Factors Affecting Maternity Leave

MA Paid Family and Medical Leave (PFML) legislation was passed in June 2018 and benefits became available in January 2021. MA PRAMS data were used to inform the legislation and will be used to monitor the implementation of the PFML program. **MA PRAMS data from 2021 found that 66.2% of MA respondents who were employed during pregnancy took paid leave only and 8.1% took both paid and unpaid leave, compared with 40-47% and 13-15% respectively in 2019-2020 combined data**. In 2021, prevalence for reasons for not taking paid family leave showed decreasing inequities by race and ethnicity. While there remains variation across race and ethnicity, these differences were not statistically significant. Additional data on family leave are available here.

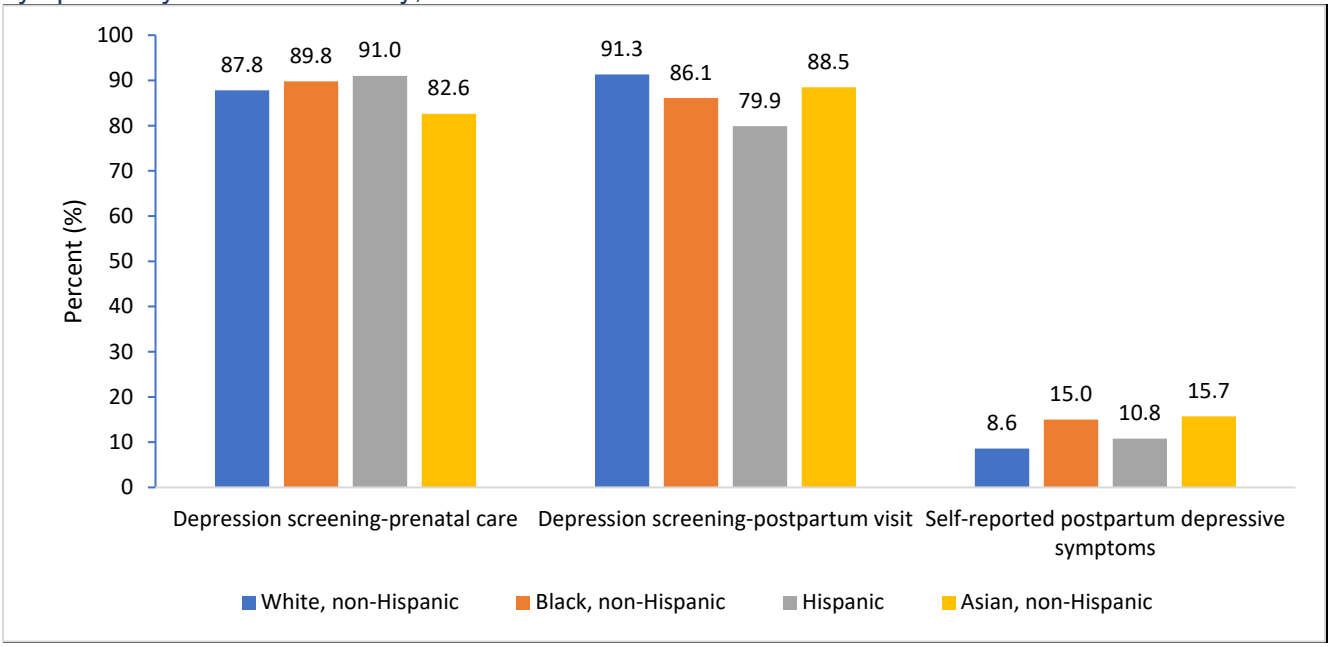
Figure 2. Prevalence of reasons for not taking family leave after birth by race and ethnicity, 2021.



## Postpartum Depressive Symptoms and Screenings

PRAMS data are used by a variety of MCH programs, policy makers and initiatives including: An Act Relative to Postpartum Depression (PPD), Chapter 313 of the Acts of 2010, which helped establish a Special Legislative Commission on PPD and requires health care providers and health plans to report PPD screening. MDPH includes PRAMS data on PPD screening and postpartum depressive symptoms in the annual legislative report, as well as uses these data for program evaluation. PRAMS data on postpartum depressive symptoms are also used to inform the MDPH Title V priority on mental health and emotional well-being and is a National Outcome Measure (NOM-24) for Title V. **Based on 2021 data, a higher prevalence of postpartum depressive symptoms was observed among Black non-Hispanic and Asian non-Hispanic respondents (15.0% and 15.7% respectively) compared to White non-Hispanic respondents (8.6%). Although people of color were more likely to report postpartum depressive symptoms compared to White people, Black and Hispanic people were less likely to receive depression screening during either prenatal care or postpartum visit.** Additional data on postpartum depressive symptoms and screening are available here.

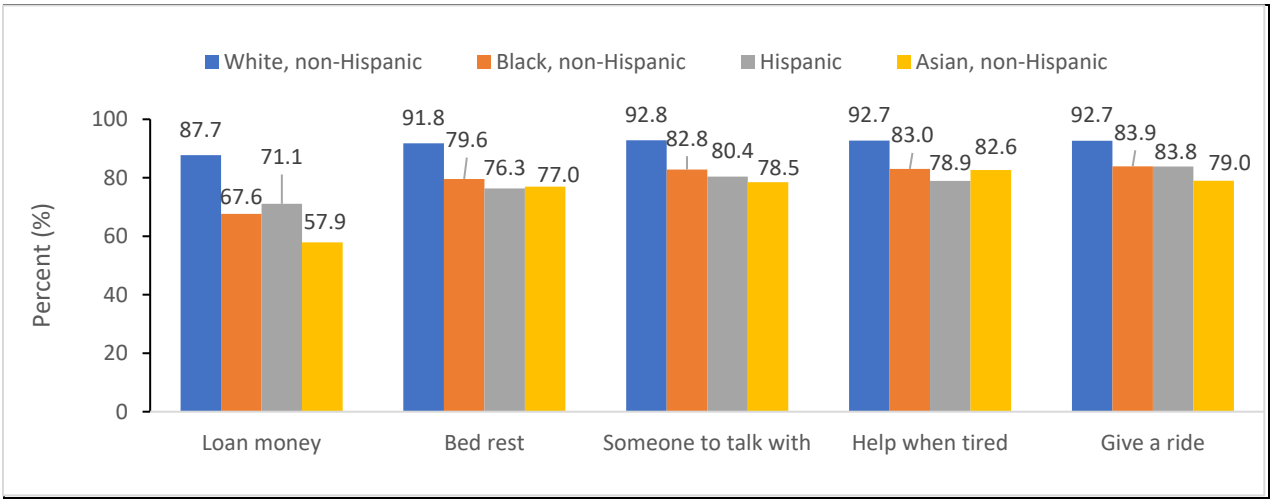
Figure 3. Prevalence of depression screening and self-reported postpartum depressive symptoms by race and ethnicity, 2021.



## Social, Emotional, and Financial Support Among Pregnant People

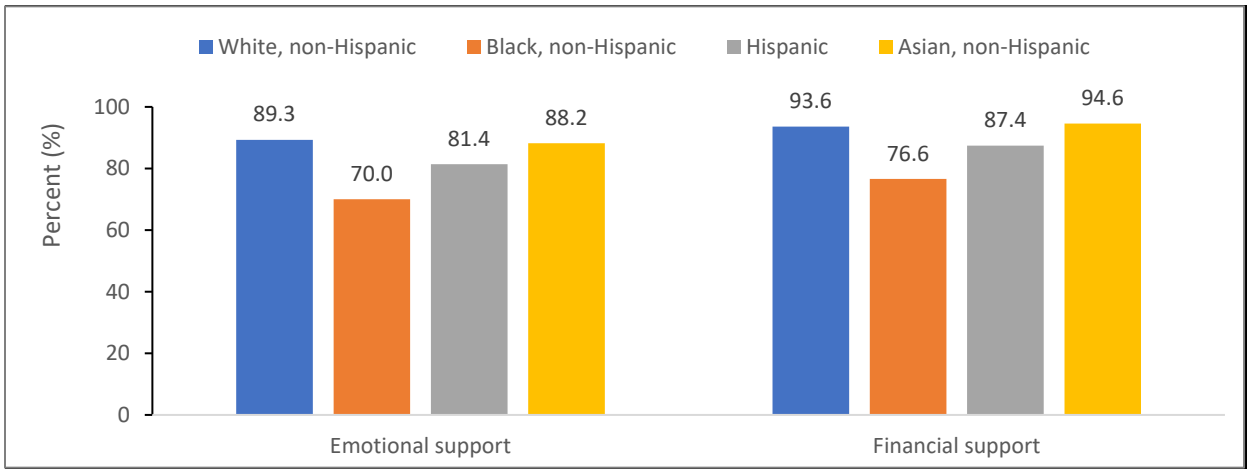
PRAMS data are a unique source for information on social support and partner support among pregnant and postpartum people and are used to monitor the Title V priority "Strengthen the capacity of the health system to promote mental health and emotional well-being." Across all five measures of social support (i.e., someone to loan new parent $50, someone to help if sick and in bed, someone to talk with about problems, someone to help if frustrated with new baby, someone to give new parent and baby a ride to doctor's office), **people of color reported less support compared to White non-Hispanics, with percentages between 57-84% compared to between 87-93% of respondents in 2019-2021, respectively.** Additional data on social and partner support and stressful life events are available here.

Figure 4. Prevalence of different types of social support after delivery, by race and ethnicity, 2019-2021 combined.




Starting in 2017, MA PRAMS began collecting data on a respondent's emotional support from their partner and financial support from infant's father. **In 2021, 86% of respondents reported having their partner's emotional support (up from 81% in 2017), while financial support from their infant's father increased from nearly 88% in 2017 to 91% in 2021, with prevalence increases seen across race and ethnicity groups**. Additional data on emotional support and father's financial support are available here.

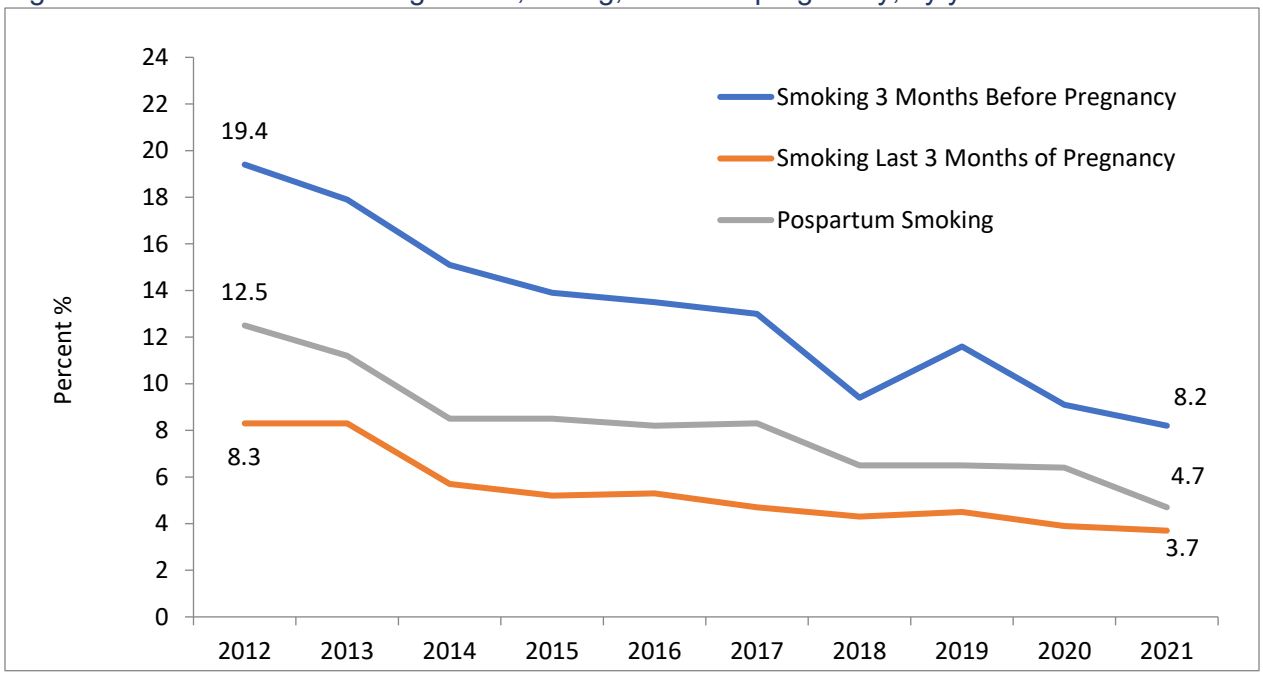
Figure 5. Prevalence of emotional support from respondent's partner and financial support from infant's father after delivery, by race and ethnicity, 2021.




## Smoking and Other Substance Use During Pregnancy

Massachusetts also relies on PRAMS data to inform its Title V priority "Prevent the use of substances, including alcohol, tobacco, marijuana and opioids, among youth and pregnant people." MA PRAMS has asked questions on alcohol consumption and smoking since 2007 and added questions on vaping in 2016. **During the last decade, smoking in the last three months of pregnancy has declined from 8.3% in 2012 to 4.5% in 2019 and 3.7% in 2021**. However, e-cigarette use in the last three months of pregnancy has increased from 0.9% in 2019 to 1.6% in 2021. Additional data on smoking, e-cigarette and alcohol use are available here.

Figure 6. Prevalence of smoking before, during, and after pregnancy, by year.




In FY19-20, MA added supplemental survey questions on perinatal substance use, including opioids and marijuana, to PRAMS and conducted a call-back survey of respondents who reported using substances in the perinatal period, providing a unique source of data on

medications during pregnancy. **Marijuana use was reported by 3.8% of respondents while the use of prescription pain relievers was reported by 6.0% of respondents in 2021**. Approximately 60% of respondents who used prescription pain relievers during pregnancy said that the prescriptions came from their obstetrician, midwife, or prenatal care provider, with another 19-20% reported receiving their prescription from the Emergency Department, and 16% received their prescriptions from their primary care physician. Notably, between 10-20% of respondents said they took prescription pain relievers during pregnancy without having received a prescription for them. Additional data on substance use, including prescription pain medication and marijuana use, are available here.

Figure 7. Prevalence of prescription pain relief during pregnancy, 2019-2021.

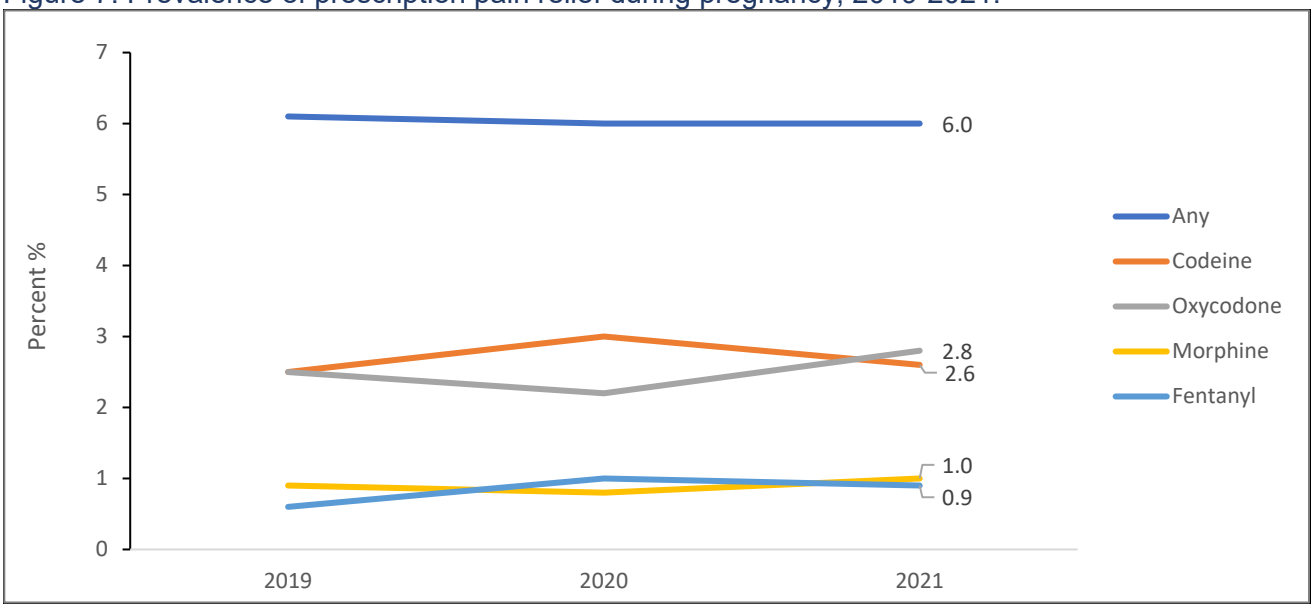
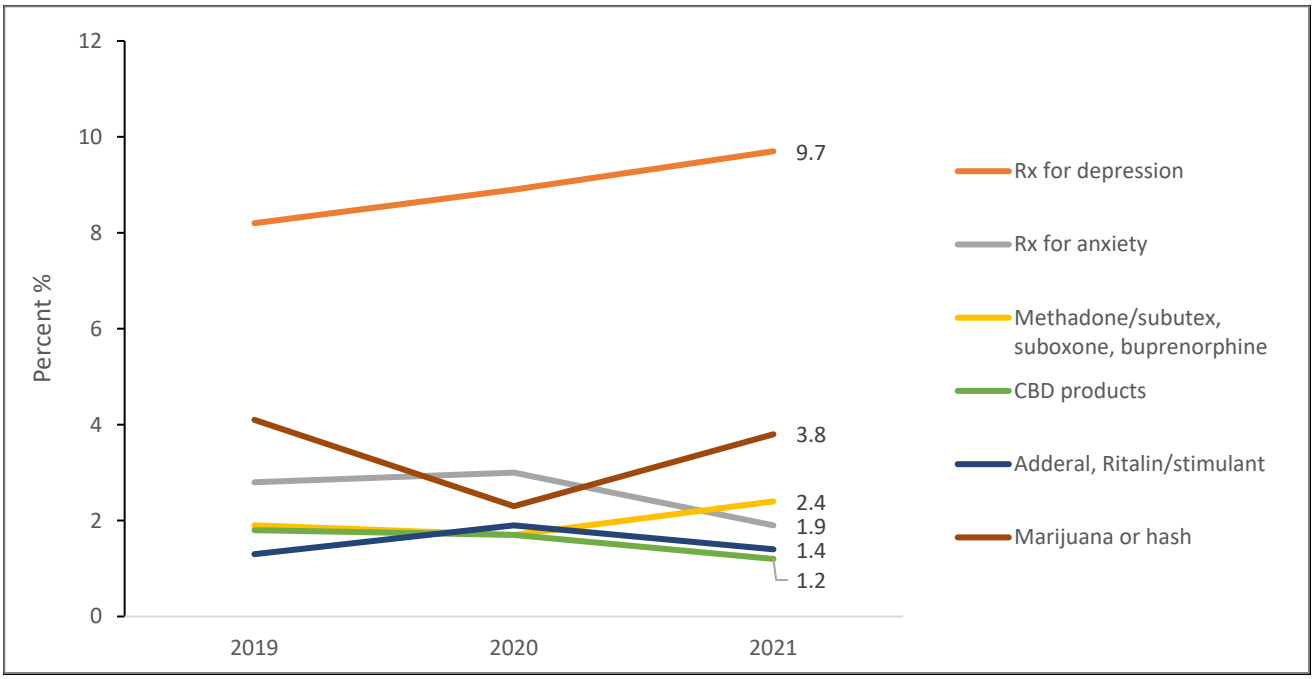


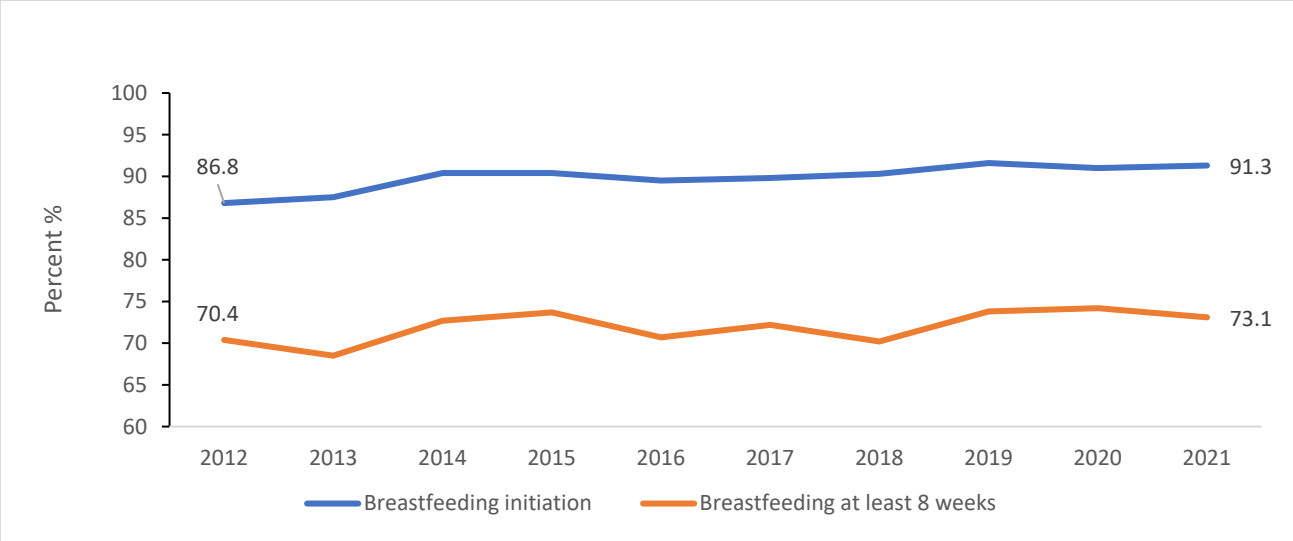

Figure 8. Prevalence of other prescriptions used in pregnancy, 2019-2021.


12
10
8
6
4
2
0
Percent %
2019
2020
2021
9.7
3.8
2.4
1.9
1.4
1.2
Rx for depression
Rx for anxiety
Methadone/subutex, suboxone, buprenorphine
CBD products
Adderal, Ritalin/stimulant
Marijuana or hash

## Breastfeeding

Although the majority of MA respondents initiate breastfeeding, **PRAMS 2021 data show that by eight weeks postpartum, the proportion of new parents reporting any breastfeeding was 66.8% for Hispanics, statistically lower than Asian non-Hispanics (82.7%)**. **White non-Hispanic parents (73.3%) and Black non-Hispanic parents (76.5%) had comparable rates.** Parents with lower socioeconomic status were also less likely to breastfeed at eight weeks; among parents with Medicaid, 63.5% breastfed for eight weeks, compared to 80.7% with private insurance, and among parents at ≤100% federal poverty level vs. >100%, rates were 64.1% and 77.6% respectively. Additional data on breastfeeding are available here**.**

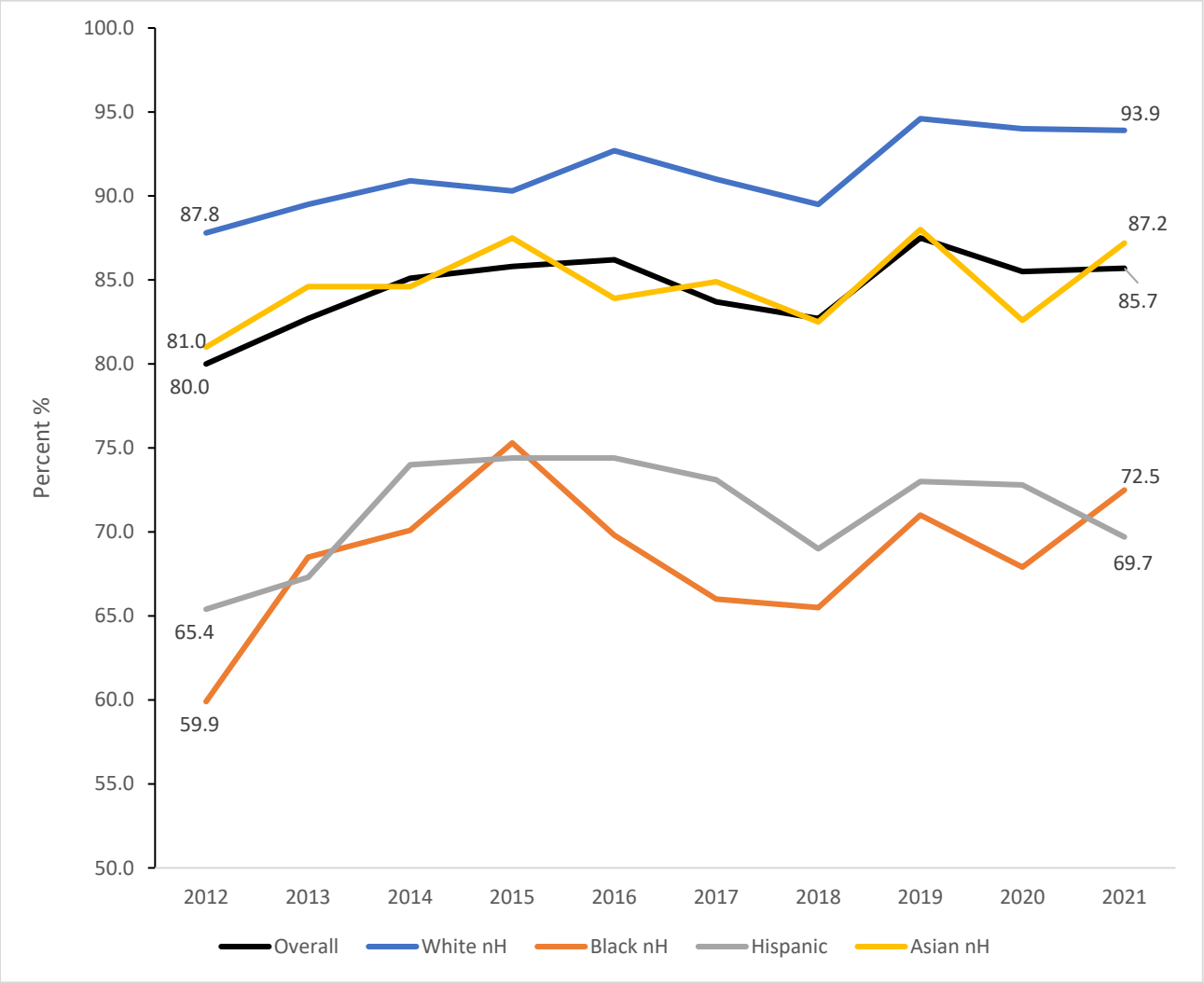
Figure 9. Prevalence of breastfeeding initiation and duration at least eight weeks, 2012-2021.



## Infant Safe Sleep

According to data from MA PRAMS, while the prevalence of supine (laid on the back) sleep positioning has increased from 80.0% in 2012 to 85.7% in 2021, disparities continue to persist. For example, in 2021, **fewer non-US-born respondents (76.8%) placed their infant supine to sleep compared with US-born respondents (89.9%). Furthermore, Black non-Hispanic (72.5%) and Hispanic (69.7%) infants had a lower prevalence of supine sleep position than White non-Hispanic infants (93.9%)**. Additional data on safe sleep are available here.

Figure 10. Prevalence of infant supine sleep position, 2012-2021.



## Oral Health

MA PRAMS data were used to inform the development of the Massachusetts Oral Health Practice Guidelines for Pregnancy and Early Childhood**.** The aim of the Guidelines was to motivate providers to promote oral health care among pregnant people and young children. While maintaining good oral hygiene is important prior to and during pregnancy and can help prevent or reduce the severity of oral health problems such as gingivitis, gingival hyperplasia, and pyogenic granuloma, change in practice has been challenging. PRAMS data showed a slight decrease in the percentage of receiving cleanings during pregnancy from 2019 to 2020, likely due to reduced access during the COVID-19 pandemic, from 58.8% to 51.1% respectively. Prevalence of teeth cleaning started to increase in 2021, with 52.7% of respondents reporting a cleaning during pregnancy. **Inequities in dental cleaning persist across racial and ethnic groups, with fewer people of color reporting a dental cleaning**; 38.7% of Black non-Hispanic, 42.8% of Hispanic, and 43.7% of Asian non-Hispanic reporting a dental cleaning, compared to White non-Hispanic respondents (58.7%). The most common reason for not visiting a dentist during pregnancy was that the pregnant people did not think it was safe (17.2% in 2021). Additional data on oral health are available here.

Further tables are presented by topic in the Appendix. MA PRAMS data reports for earlier years are available on the MA PRAMS website here and on the MA Population Health Information Tool website for PRAMS here.

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## PRAMS Appendix

PRAMS is a collaborative surveillance project of the Centers for Disease Control and Prevention (CDC) and state health departments. PRAMS collects state-specific, population-based data on respondents' attitudes and experiences before, during, and shortly after pregnancy. MA PRAMS oversamples by race and Hispanic ethnicity to ensure adequate representation of racial and ethnic minority birth parents, and birth parents are sampled for participation between two and six months postpartum.

All percentages in this report are weighted (see PRAMS Methodology) to represent the Massachusetts birthing population. In the Appendix of the report, additional tables are presented detailing percentage responses to PRAMS questions and their 95% confidence intervals.

This is the eighth PRAMS report for Massachusetts since MA PRAMS began in 2007.

## Table 1. Prevalence of racism by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2019

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 1,117 | 2.8 (1.6-4.9) | 1,826 | 28.7 (23.9-34.1) | 2,236 | 17.7 (14.2-21.8) | 885 | 15.6 (12.0-20.0) |
| **Age (years)** | | | | | | | | |
| <20 | Insufficient data[2] | | Insufficient data[2] | | 240 | 36.0 (17.5-60.0) | 0 | . (.-.) |
| 20-29 | 470 | 4.6 (2.1-10) | 698 | 29.2 (21.7-38.1) | 1,199 | 18.0 (13.2-24.0) | 119 | 8.9 (4.1-18.3) |
| 30-39 | 553 | 2.0 (0.9-4.7) | 914 | 29.0 (22.8-36.1) | 722 | 14.7 (10.1-20.9) | 765 | 18.9 (14.4-24.5) |
| 40+ | 0 | 0 (.-.) | 105 | 18.5 (9.2-33.9) | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | | | |
| <High school | Insufficient data[2] | | 246 | 36.8 (16.8-62.7) | 597 | 20.3 (13.0-30.2) | Insufficient data[2] | |
| High school diploma | Insufficient data[2] | | 254 | 19.5 (11.4-31.2) | 406 | 11.5 (6.8-19.0) | Insufficient data[2] | |
| Some college | Insufficient data[2] | | 638 | 26.1 (19.5-33.9) | 930 | 23.6 (16.8-32.0) | Insufficient data[2] | |
| College graduate | 511 | 2.0 (0.9-4.6) | 643 | 37.4 (28.9-46.6) | 277 | 13.2 (7.3-22.8) | 766 | 18.6 (14.2-23.9) |
| **Insurance type** | | | | | | | | |
| Private | 456 | 1.5 (0.7-3.4) | 660 | 31.1 (23.6-39.7) | 470 | 16.9 (10.7-25.5) | 689 | 17.5 (13.2-22.9) |
| Medicaid/MassHealth | 394 | 4.8 (1.8-12.1) | 1,027 | 26.7 (20.3-34.2) | 1,427 | 16.3 (12.3-21.4) | 136 | 10.6 (4.9-21.4) |
| All other | Insufficient data[2] | | 114 | 46.7 (23.8-71.1) | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 505 | 12.3 (5.2-26.3) | 505 | 25.2 (17.8-34.4) | 1,157 | 20.6 (15.1-27.4) | 102 | 14.4 (6.1-30.3) |
| >100% FPL | 612 | 1.7 (0.8-3.6) | 1,170 | 30.6 (24.7-37.2) | 783 | 13.6 (9.4-19.3) | 748 | 15.9 (12.1-20.8) |
| **Nativity** | | | | | | | | |
| Non-US-born | 511 | 15.4 (6.6-31.9) | 790 | 21.5 (16.3-27.7) | 1,194 | 17.9 (13.2-23.7) | 626 | 14.0 (10.2-18.9) |
| US-born | 606 | 1.7 (0.8-3.4) | 1,036 | 38.7 (30.1-48.0) | 1,017 | 17.1 (12.3-23.4) | 258 | 21.2 (13.3-32.2) |
| **Marital status** | | | | | | | | |
| Unmarried | 437 | 4.8 (2.0-11.3) | 982 | 30.4 (23.0-38.9) | 1,470 | 20.0 (15.1-26.0) | Insufficient data[2] | |
| Married | 680 | 2.2 (1.1-4.6) | 844 | 27.0 (21.1-33.8) | 765 | 14.5 (10.2-20.2) | 825 | 16.2 (12.4-20.8) |
| **WIC participation** | | | | | | | | |
| No | 650 | 2.0 (1.0-3.9) | 942 | 35.5 (28.1-43.7) | 727 | 16.8 (11.5-24.0) | 724 | 16.6 (12.6-21.6) |
| Yes | 467 | 7.3 (2.9-17.1) | 884 | 24.3 (18.0-32.0) | 1,509 | 18.2 (13.8-23.5) | 126 | 9.8 (4.2-21.1) |
| **Disability status** | | | | | | | | |
| No | 786 | 2.2 (1.1-4.1) | 1,537 | 27.5 (22.4-33.4) | 1,525 | 14.4 (11.0-18.6) | 798 | 15.3 (11.6-19.9) |
| Yes | Insufficient data[2] | | 289 | 37.3 (24.6-52.0) | 710 | 35.3 (24.4-47.9) | 86 | 18.9 (8.2-37.8) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

| Table 2. Prevalence of racism by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2020 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **White non-Hispanic** | | **Black non-Hispanic** | | **Hispanic** | | **Asian non-Hispanic** | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 1,009 | 2.8 (1.4-5.5) | 2,287 | 37.4 (31.9-43.3) | 2,157 | 16.7 (13.1-21.1) | 1,080 | 18.2 (14.2-22.9) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | Insufficient data[2] | | 864 | 39.2 (29.8-49.5) | 1,080 | 16.4 (11.4-23.1) | 229 | 15.5 (8.6-26.4) |
| 30-39 | 758 | 3.2 (1.4-7.2) | 1,093 | 34.7 (28.4-41.6) | 844 | 17.0 (11.7-24) | 780 | 18.4 (13.9-24) |
| 40+ | Insufficient data[2] | | 276 | 40.9 (20.9-64.6) | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | | | |
| <High school | 0 | 0 (.-.) | 192 | 37.8 (21.6-57.3) | 272 | 9.4 (4.1-19.8) | 0 | 0 (.-.) |
| High school diploma | Insufficient data[2] | | 326 | 25.6 (16.5-37.4) | 403 | 11.0 (6.0-19.3) | Insufficient data[2] | |
| Some college | Insufficient data[2] | | 652 | 32.9 (24.5-42.5) | 838 | 24.7 (17.4-33.8) | Insufficient data[2] | |
| College graduate | 777 | 3.1 (1.5-6.5) | 1,001 | 45.9 (36.6-55.5) | 644 | 25.6 (16.4-37.6) | 871 | 19.1 (14.7-24.4) |
| **Insurance type** | | | | | | | | |
| Private | 490 | 1.8 (0.8-3.9) | 845 | 47.6 (38.4-56.9) | 640 | 23.1 (15.4-33.1) | 900 | 20.9 (16.1-26.7) |
| Medicaid/MassHealth | Insufficient data[2] | | 1,325 | 34.8 (27.4-42.9) | 1,426 | 15.2 (11.1-20.4) | 181 | 14.9 (7.5-27.4) |
| All other | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | Insufficient data[2] | | 758 | 39.1 (30.1-49.0) | 935 | 18.8 (12.7-26.9) | 155 | 17.1 (7.7-33.6) |
| >100% FPL | 811 | 2.6 (1.2-5.2) | 1,418 | 40.3 (33.0-48.1) | 1,064 | 17.4 (12.5-23.7) | 926 | 18.7 (14.5-23.9) |
| **Nativity** | | | | | | | | |
| Non-US-born | Insufficient data[2] | | 1,060 | 26.7 (21.2-33.1) | 936 | 11.9 (8.0-17.4) | 794 | 16.4 (12.2-21.7) |
| US-born | 672 | 2.1 (0.9-4.7) | 1,227 | 57.2 (47.1-66.7) | 1,221 | 24.0 (17.6-31.9) | 286 | 25.8 (16.3-38.1) |
| **Marital status** | | | | | | | | |
| Unmarried | Insufficient data[2] | | 1,197 | 41.7 (32.9-51.0) | 1,357 | 19.2 (14.1-25.6) | Insufficient data[2] | |
| Married | 853 | 3.0 (1.4-6.5) | 1,090 | 33.7 (27.2-40.8) | 800 | 13.6 (9.0-20.1) | 1,009 | 18.5 (14.4-23.5) |
| **WIC participation** | | | | | | | | |
| No | 789 | 2.6 (1.2-5.4) | 905 | 39.3 (31.6-47.6) | 1,005 | 22.9 (16.1-31.5) | 1,009 | 20.3 (15.8-25.7) |
| Yes | Insufficient data[2] | | 1,367 | 36.7 (29.2-45.0) | 1,151 | 13.6 (9.6-18.7) | Insufficient data[2] | |
| **Disability status** | | | | | | | | |
| No | 887 | 2.7 (1.3-5.7) | 1,776 | 34.5 (28.5-41.0) | 1,335 | 12.2 (9.0-16.3) | 1,010 | 18.3 (14.2-23.3) |
| Yes | Insufficient data[2] | | 484 | 53.0 (39.3- 66.2) | 791 | 41.8 (28.0- 57.0) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 3. Prevalence of racism by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2021

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 1,361 | 3.5 (2.1-5.7) | 2,266 | 36.6 (30.9-42.8) | 2,304 | 17.4 (13.7-21.7) | 1,454 | 28.9 (23.6-35.0) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | Insufficient data[2] | | 745 | 32.8 (24.0-43.0) | 874 | 13.1 (8.7-19.2) | 196 | 19.3 (9.8-34.4) |
| 30-39 | 1,007 | 3.4 (1.8-6.1) | 1,174 | 36.8 (29.9-44.3) | 1,252 | 22.6 (16.8-29.8) | 1,221 | 32.7 (26.3-39.8) |
| 40+ | Insufficient data[2] | | 251 | 53.6 (26.2-78.9) | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | | | |
| <High school | 0 | 0 (.-.) | Insufficient data[2] | | 307 | 10.9 (6.0-18.9) | Insufficient data[2] | |
| High school diploma | Insufficient data[2] | | 347 | 22.8 (13.2-36.5) | 545 | 15.1 (9.1-24.1) | Insufficient data[2] | |
| Some college | Insufficient data[2] | | 729 | 36.3 (28.0-45.5) | 609 | 17.2 (10.6-26.9) | Insufficient data[2] | |
| College graduate | 964 | 3.5 (1.9-6.1) | 987 | 48 (37.9-58.3) | 814 | 27.3 (18.8-38.0) | 1,276 | 32.1 (26.1-38.8) |
| **Insurance type** | | | | | | | | |
| Private | 663 | 2.3 (1.2-4.5) | 1,006 | 47.2 (38.4-56.1) | 804 | 23.7 (16.0-33.7) | 1,150 | 30.9 (24.8-37.9) |
| Medicaid | 598 | 7.2 (3.1-15.8) | 1,178 | 32.4 (24.6-41.3) | 1,256 | 14.0 (10.2-19.1) | 232 | 24.5 (13.0-41.4) |
| Other | 0 | 0 (.-.) | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 236 | 6.6 (1.9-20.1) | 757 | 32.3 (23.4-42.7) | 863 | 17.9 (12.1-25.7) | 142 | 28.6 (12.2-53.5) |
| >100% FPL | 1,025 | 2.9 (1.6-5.3) | 1,462 | 40.5 (33.0-48.4) | 1,381 | 19.6 (14.5-25.9) | 1,257 | 29.2 (23.5-35.6) |
| **Nativity** | | | | | | | | |
| Non-US-born | 716 | 15.9 (7.6-30.3) | 1,035 | 28.8 (21.7-37.1) | 1,362 | 16.8 (12.4-22.2) | 914 | 23.9 (18.2-30.8) |
| US-born | 645 | 1.8 (0.9-3.7) | 1,231 | 47.6 (38.4-56.9) | 942 | 18.3 (12.5-25.9) | 539 | 44.8 (32.9-57.4) |
| **Marital status** | | | | | | | | |
| Unmarried | Insufficient data[2] | | 1,147 | 35.8 (28.0-44.5) | 1,021 | 14.8 (10.4-20.6) | 143 | 25.9 (12.4-46.3) |
| Married | 1,182 | 4.0 (2.3-6.7) | 1,119 | 37.5 (29.4-46.4) | 1,284 | 20.2 (14.7-26.9) | 1,310 | 29.3 (23.7-35.7) |
| **WIC participation** | | | | | | | | |
| No | 864 | 2.6 (1.4-4.7) | 1,146 | 40.8 (32.1-50.2) | 1,345 | 26.5 (19.8-34.6) | 1,275 | 31.0 (25.1-37.6) |
| Yes | 497 | 8.2 (3.2-19.4) | 1,105 | 32.8 (25.6-41.0) | 960 | 11.8 (8.1-16.9) | 160 | 18.7 (8.5-36.5) |
| **Disability status** | | | | | | | | |
| No | 864 | 2.4 (1.3-4.4) | 1,725 | 34.7 (28.4-41.6) | 1,457 | 13.1 (9.7-17.4) | 1,310 | 29.3 (23.6-35.8) |
| Yes | Insufficient data[2] | | 525 | 44.6 (31.2-58.8) | 810 | 40.0 (27.5-54.0) | 143 | 25.8 (12.6-45.6) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 4. Prevalence of feeling stressed due to racial/ethnic background by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2019

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 710 | 1.8 (0.9-3.7) | **1,125** | **17.6 (13.6-22.6)** | **1,014** | **8.0 (5.7-11.2)** | 695 | 12.2 (9.1-16.3) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | . (.-.) |
| 20-29 | Insufficient data[2] | | 431 | 18.1 (12.4-25.7) | 626 | 9.4 (6.0-14.4) | 119 | 8.9 (4.1-18.3) |
| 30-39 | 459 | 1.7 (0.7-4.3) | 511 | 16.1 (11.4-22.3) | 286 | 5.9 (3.2-10.6) | 576 | 14.2 (10.3-19.3) |
| 40+ | 0 | 0 (.-.) | 89 | 15.7 (7.3-30.6) | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | | | |
| <High school | Insufficient data[2] | | Insufficient data[2] | | 192 | 6.5 (3.0-13.8) | Insufficient data[2] | |
| High school diploma | Insufficient data[2] | | 133 | 10.2 (4.7-21.0) | 170 | 4.9 (2.0-11.3) | Insufficient data[2] | |
| Some college | Insufficient data[2] | | 397 | 16.2 (11.1-23.2) | 425 | 10.8 (6.2-18.0) | Insufficient data[2] | |
| College graduate | 417 | 1.6 (0.6-4.1) | 441 | 25.4 (18.2-34.2) | 228 | 10.8 (5.5-20.1) | 577 | 13.9 (10.2-18.8) |
| **Insurance type** | | | | | | | | |
| Private | 337 | 1.1 (0.4-2.9) | 454 | 21.4 (15.2-29.2) | 228 | 8.1 (4.1-15.3) | 517 | 13.2 (9.5-18.1) |
| Medicaid | Insufficient data[2] | | 601 | 15.6 (10.3-23.0) | 701 | 8.0 (5.3-12.1) | 118 | 9.0 (3.9-19.7) |
| Other | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | Insufficient data[2] | | 279 | 13.9 (8.4-22.3) | 531 | 9.5 (5.8-14.9) | Insufficient data[2] | |
| >100% FPL | 455 | 1.3 (0.5-3.1) | 695 | 18.1 (13.6-23.6) | 414 | 7.2 (4.2-12.1) | 610 | 13.1 (9.5-17.6) |
| **Nativity** | | | | | | | | |
| Non-US-born | Insufficient data[2] | | 463 | 12.5 (8.6-17.9) | 479 | 7.2 (4.4-11.6) | 471 | 10.5 (7.3-15.1) |
| US-born | 387 | 1.1 (0.4-2.7) | 662 | 24.7 (17.4-33.9) | 511 | 8.6 (5.2-13.8) | 224 | 18.4 (11.1-29.0) |
| **Marital status** | | | | | | | | |
| Unmarried | Insufficient data[2] | | 586 | 18.1 (12.0-26.4) | 653 | 8.9 (5.6-13.6) | Insufficient data[2] | |
| Married | 443 | 1.5 (0.6-3.5) | 539 | 17.2 (12.4-23.3) | 362 | 6.9 (4.1-11.5) | 670 | 13.1 (9.7-17.5) |
| **WIC participation** | | | | | | | | |
| No | 455 | 1.4 (0.6-3.3) | 584 | 21.9 (16.1-29.0) | 316 | 7.3 (4.0-13.2) | 569 | 13.1 (9.5-17.8) |
| Yes | Insufficient data[2] | | 541 | 14.9 (9.6-22.4) | 698 | 8.4 (5.5-12.6) | 126 | 9.6 (4.1-20.7) |
| **Disability status** | | | | | | | | |
| No | 592 | 1.6 (0.8-3.5) | 1,014 | 18.1 (13.7-23.6) | 634 | 6.0 (3.9-9.1) | 661 | 12.6 (9.3-17.0) |
| Yes | Insufficient data[2] | | 111 | 14.3 (7.3-26.2) | 380 | 19.2 (11.0-31.4) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 5. Prevalence of feeling stressed due to racial/ethnic background by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2020

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 774 | 2.1 (0.9-4.8) | 1,746 | 28.4 (23.2-34.2) | 1,050 | 8.1 (5.7-11.3) | 857 | 14.4 (10.9-18.8) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | Insufficient data[2] | | 713 | 32.2 (23.5-42.3) | 412 | 6.2 (3.6-10.7) | 207 | 14 (7.5-24.7) |
| 30-39 | 657 | 2.7 (1.1-6.8) | 786 | 24.7 (19.3-31.0) | 496 | 9.9 (6.1-15.8) | 628 | 14.8 (10.8-20.0) |
| 40+ | Insufficient data[2] | | 219 | 32.5 (13.4-60.1) | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | | | |
| <High school | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| High school diploma | 0 | 0 (.-.) | 210 | 16.3 (9.0-27.7) | 214 | 5.8 (2.7-11.8) | Insufficient data[2] | |
| Some college | Insufficient data[2] | | 511 | 25.6 (18.1-34.9) | 436 | 12.9 (7.6-20.8) | Insufficient data[2] | |
| College graduate | 576 | 2.3 (0.9-5.5) | 853 | 39.1 (30.4-48.5) | 318 | 12.6 (6.9-21.9) | 714 | 15.6 (11.6-20.7) |
| **Insurance type** | | | | | | | | |
| Private | 255 | 0.9 (0.3-2.8) | 670 | 37.7 (29.1-47.1) | 420 | 15.2 (9.0-24.4) | 764 | 17.8 (13.3-23.3) |
| Medicaid | Insufficient data[2] | | 990 | 25.7 (18.9-33.7) | 599 | 6.3 (4.0-9.9) | Insufficient data[2] | |
| Other | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | Insufficient data[2] | | 506 | 25.7 (18.0-35.3) | 388 | 7.7 (4.4-13.2) | Insufficient data[2] | |
| >100% FPL | 576 | 1.8 (0.7-4.4) | 1,171 | 33.2 (26.1-41.1) | 662 | 10.8 (7.0-16.3) | 785 | 15.9 (11.9-20.9) |
| **Nativity** | | | | | | | | |
| Non-US-born | Insufficient data[2] | | 707 | 17.7 (13.2-23.3) | 450 | 5.7 (3.3-9.5) | 657 | 13.6 (9.8-18.5) |
| US-born | 437 | 1.4 (0.5-4.0) | 1,039 | 48.1 (37.9-58.4) | 600 | 11.8 (7.5-18.0) | 200 | 18 (10.2-29.6) |
| **Marital status** | | | | | | | | |
| Unmarried | Insufficient data[2] | | 970 | 33.4 (25.0-43.0) | 608 | 8.6 (5.4-13.4) | Insufficient data[2] | |
| Married | 652 | 2.3 (0.9-5.8) | 776 | 23.9 (18.4-30.4) | 442 | 7.5 (4.5-12.2) | 801 | 14.7 (11.0-19.3) |
| **WIC participation** | | | | | | | | |
| No | 554 | 1.8 (0.7-4.6) | 714 | 31.0 (24.0-39.1) | 625 | 14.1 (9.1-21.2) | 857 | 17.2 (13.1-22.4) |
| Yes | Insufficient data[2] | | 1,017 | 27.0 (20.1-35.3) | 425 | 5.0 (2.9-8.4) | 0 | 0 (.-.) |
| **Disability status** | | | | | | | | |
| No | 652 | 2.0 (0.8-5.0) | 1,014 | 18.1 (13.7-23.6) | 586 | 5.3 (3.4-8.2) | 786 | 14.3 (10.6-18.9) |
| Yes | Insufficient data[2] | | 111 | 14.3 (7.3-26.2) | 434 | 22.9 (13.2-36.8) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 6. Prevalence of feeling stressed due to racial/ethnic background by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2021

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 688 | 1.7 (0.8-3.6) | 1,767 | 28.3 (23.0-34.4) | 1,660 | 12.5 (9.4-16.5) | 952 | 19.0 (14.6-24.4) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | | Insufficient data[2] | | Insufficient data[2] | 0 | 0 (.-.) |
| 20-29 | | Insufficient data[2] | 614 | 27.0 (18.9-37.0) | 585 | 8.8 (5.2-14.5) | 125 | 12.2 (5.1-26.7) |
| 30-39 | 587 | 2.0 (0.9-4.4) | 873 | 26.9 (20.9-33.9) | 963 | 17.4 (12.2-24.1) | 791 | 21.3 (16.1-27.6) |
| 40+ | 0 | 0 (.-.) | 184 | 39.3 (13.4-72.9) | | Insufficient data[2] | | Insufficient data[2] |
| **Education** | | | | | | | | |
| <High school | 0 | 0 (.-.) | | Insufficient data[2] | 180 | 6.4 (2.9-13.4) | | Insufficient data[2] |
| High school diploma | | Insufficient data[2] | 276 | 18.1 (9.7-31.3) | 397 | 11.0 (6.0-19.4) | 0 | 0 (.-.) |
| Some college | | Insufficient data[2] | 493 | 24.3 (17.3-33.1) | 350 | 10.0 (5.0-19.0) | | Insufficient data[2] |
| College graduate | 326 | 1.2 (0.5-2.9) | 831 | 40.4 (30.3-51.4) | 703 | 23.6 (15.6-34) | 845 | 21.4 (16.4-27.4) |
| **Insurance type** | | | | | | | | |
| Private | 326 | 1.1 (0.5-2.8) | 752 | 35.2 (27.3-44.1) | 656 | 19.4 (12.4-29.0) | 755 | 20.3 (15.2-26.5) |
| Medicaid | | Insufficient data[2] | 964 | 26.3 (18.9-35.2) | 826 | 9.3 (6.1-13.8) | 143 | 15.1 (6.7-30.6) |
| Other | 0 | 0 (.-.) | 0 | 0 (.-.) | | Insufficient data[2] | | Insufficient data[2] |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | | Insufficient data[2] | 595 | 25.0 (17.2-34.9) | 500 | 10.5 (6.1-17.5) | | Insufficient data[2] |
| >100% FPL | 587 | 1.7 (0.8-3.7) | 1,141 | 31.6 (24.4-39.7) | 1,130 | 16.0 (11.4-22) | 791 | 18.4 (13.9-24.1) |
| **Nativity** | | | | | | | | |
| Non-US-born | | Insufficient data[2] | 768 | 21.0 (14.5-29.5) | 977 | 12.0 (8.3-17.0) | 610 | 16.0 (11.4-22.2) |
| US-born | 408 | 1.2 (0.5-2.8) | 999 | 38.6 (30.1-47.9) | 683 | 13.4 (8.4-20.6) | 342 | 28.4 (18.8-40.5) |
| **Marital status** | | | | | | | | |
| Unmarried | | Insufficient data[2] | 882 | 27.5 (20.5-35.9) | 658 | 9.6 (6.1-14.8) | 125 | 22.6 (10.2-43.1) |
| Married | 509 | 1.7 (0.8-3.7) | 885 | 29.2 (21.5-38.2) | 1,002 | 15.7 (10.9-22.2) | 826 | 18.6 (14.0-24.2) |
| **WIC participation** | | | | | | | | |
| No | 426 | 1.3 (0.6-2.9) | 844 | 30.1 (21.8-39.9) | 982 | 19.4 (13.6-26.9) | 844 | 20.6 (15.7-26.6) |
| Yes | | Insufficient data[2] | 907 | 26.5 (20.0-34.3) | 678 | 8.4 (5.3-13.0) | | Insufficient data[2] |
| **Disability status** | | | | | | | | |
| No | 326 | 0.9 (0.4-2.2) | 1,337 | 26.7 (20.8-33.6) | 991 | 8.9 (6.2-12.7) | 844 | 19.0 (14.4-24.6) |
| Yes | | Insufficient data[2] | 414 | 34.7 (22.8-48.9) | 632 | 31.2 (20.0-45.3) | 107 | 19.3 (8.1-39.4) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 7. Prevalence of feeling upset due to treatment based on racial/ethnic background by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2019

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 662 | 1.7 (0.8-3.4) | 1,266 | 19.9 (16.0-24.4) | 1,670 | 13.1 (10.1-16.9) | 516 | 9.0 (6.4-12.7) |
| **Age (years)** | | | | | | | | |
| <20 | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | 0 | . (.-.) |
| 20-29 | 338 | 3.3 (1.3-8.3) | 555 | 23.1 (16.4-31.6) | 903 | 13.5 (9.3-19.1) | Insufficient data[2] | |
| 30-39 | Insufficient data[2] | | 635 | 20.1 (15.0-26.5) | 596 | 12.2 (8.0-18.1) | 499 | 12.3 (8.7-17.1) |
| 40+ | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | | | |
| <High school | Insufficient data[2] | | 152 | 22.8 (10.4-42.8) | 380 | 12.7 (7.0-21.9) | Insufficient data[2] | |
| High school diploma | Insufficient data[2] | | 165 | 12.8 (6.5-23.7) | 303 | 8.6 (4.7-15.4) | 0 | 0 (.-.) |
| Some college | Insufficient data[2] | | 460 | 18.6 (13.0-25.9) | 751 | 19.0 (12.9-27.2) | 0 | 0 (.-.) |
| College graduate | Insufficient data[2] | | 472 | 27.4 (20.0-36.4) | 210 | 10.0 (5.1-18.7) | 465 | 11.2 (7.9-15.7) |
| **Insurance type** | | | | | | | | |
| Private | Insufficient data[2] | | 536 | 25.3 (18.6-33.5) | 377 | 13.3 (8.0-21.2) | 414 | 10.5 (7.2-15.1) |
| Medicaid | Insufficient data[2] | | 647 | 16.8 (12.1-22.7) | 1,090 | 12.5 (8.9-17.2) | Insufficient data[2] | |
| Other | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | Insufficient data[2] | | 340 | 17.1 (11.0-25.7) | 948 | 16.8 (11.8-23.4) | Insufficient data[2] | |
| >100% FPL | 386 | 1.1 (0.4-2.8) | 869 | 22.6 (17.6-28.6) | 561 | 9.7 (6.3-14.8) | 439 | 9.4 (6.4-13.4) |
| **Nativity** | | | | | | | | |
| Non-US-born | Insufficient data[2] | | 498 | 13.5 (9.5-19.0) | 790 | 11.7 (8.0-16.9) | 292 | 6.5 (4.0-10.3) |
| US-born | 262 | 0.7 (0.3-2.0) | 768 | 28.5 (21.6-36.7) | 855 | 14.4 (10.0-20.3) | 224 | 18.4 (11.1-29) |
| **Marital status** | | | | | | | | |
| Unmarried | Insufficient data[2] | | 558 | 17.2 (12.2-23.7) | 1,147 | 15.6 (11.2-21.2) | Insufficient data[2] | |
| Married | 492 | 1.6 (0.7-3.8) | 707 | 22.6 (17.2-29.2) | 523 | 9.8 (6.3-14.8) | 456 | 8.9 (6.2-12.7) |
| **WIC participation** | | | | | | | | |
| No | 424 | 1.3 (0.5-3.0) | 761 | 28.4 (21.7-36.1) | 486 | 11.3 (7.1-17.4) | 431 | 9.9 (6.8-14.1) |
| Yes | Insufficient data[2] | | 505 | 14.0 (9.7-19.7) | 1,183 | 14.2 (10.3-19.1) | Insufficient data[2] | |
| **Disability status** | | | | | | | | |
| No | 449 | 1.2 (0.5-2.8) | 1,063 | 18.9 (14.9-23.7) | 1,043 | 9.8 (7.0-13.5) | 464 | 8.8 (6.1-12.6) |
| Yes | Insufficient data[2] | | 203 | 26.8 (15.7-41.7) | 627 | 31.1 (20.8-43.8) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 8. Prevalence of feeling upset due to treatment based on racial/ethnic background by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2020

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 609 | 1.7 (0.7-3.9) | 1,763 | 28.9 (23.7-34.7) | 1,614 | 12.4 (9.3-16.4) | 639 | 10.8 (7.8-14.7) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | Insufficient data[2] | | 617 | 28.4 (20.0-38.5) | 763 | 11.4 (7.3-17.5) | Insufficient data[2] | |
| 30-39 | 459 | 1.9 (0.7-5.3) | 846 | 26.7 (21.1-33.2) | 618 | 12.4 (8.0-18.8) | 481 | 11.4 (8.0-16.1) |
| 40+ | Insufficient data[2] | | 246 | 36.5 (16.8-62.2) | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | | | |
| <High school | 0 | 0 (.-.) | 183 | 34.9 (19.4-54.4) | Insufficient data[2] | | 0 | 0 (.-.) |
| High school diploma | Insufficient data[2] | | 227 | 17.8 (10.3-29.0) | 314 | 8.5 (4.2-16.7) | Insufficient data[2] | |
| Some college | Insufficient data[2] | | 467 | 23.5 (16.2-32.8) | 618 | 18.2 (12.0-26.8) | Insufficient data[2] | |
| College graduate | 377 | 1.5 (0.6-3.7) | 771 | 35.8 (27.5-45.1) | 553 | 22.0 (13.3-34.1) | 546 | 12.0 (8.5-16.5) |
| **Insurance type** | | | | | | | | |
| Private | 289 | 1.0 (0.4-2.8) | 685 | 38.5 (29.9-48.0) | 451 | 16.3 (9.9-25.6) | 530 | 12.4 (8.8-17.3) |
| Medicaid | Insufficient data[2] | | 977 | 25.7 (19.0-33.9) | 1,163 | 12.2 (8.6-17.2) | 109 | 9 (3.7-20.2) |
| Other | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 0 | 0 (.-.) | 566 | 29.0 (20.9-38.6) | 747 | 14.9 (9.5-22.8) | Insufficient data[2] | |
| >100% FPL | 609 | 1.9 (0.8-4.4) | 1,129 | 32.3 (25.3-40.3) | 799 | 12.9 (8.8-18.6) | 568 | 11.6 (8.3-16.0) |
| **Nativity** | | | | | | | | |
| Non-US-born | Insufficient data[2] | | 778 | 19.8 (15.0-25.7) | 612 | 7.7 (4.7-12.5) | 423 | 8.8 (5.9-13.0) |
| US-born | 471 | 1.5 (0.5-4.0) | 985 | 45.6 (35.5-56.1) | 1,001 | 19.7 (13.8-27.3) | 216 | 19.4 (11.4-31.2) |
| **Marital status** | | | | | | | | |
| Unmarried | Insufficient data[2] | | 1,029 | 35.6 (27.1-45.2) | 986 | 14.0 (9.7-19.7) | Insufficient data[2] | |
| Married | 554 | 2 (0.8-4.9) | 734 | 22.9 (17.5-29.3) | 628 | 10.5 (6.4-16.8) | 601 | 11.1 (7.9-15.3) |
| **WIC participation** | | | | | | | | |
| No | 588 | 2 (0.8-4.7) | 742 | 32.2 (25.0-40.4) | 762 | 17.4 (11.4-25.6) | 584 | 11.8 (8.5-16.2) |
| Yes | Insufficient data[2] | | 1,022 | 27.5 (20.6-35.8) | 851 | 9.9 (6.6-14.6) | Insufficient data[2] | |
| **Disability status** | | | | | | | | |
| No | 487 | 1.5 (0.5-3.9) | 1,336 | 26.0 (20.5-32.4) | 988 | 9.0 (6.3-12.7) | 569 | 10.4 (7.3-14.5) |
| Yes | Insufficient data[2] | | 400 | 43.8 (30.8-57.7) | 626 | 32 (19.9-47.2) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 9. Prevalence of feeling upset due to treatment based on racial/ethnic background by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2021

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 828 | 2.1 (1.1-3.9) | 1,923 | 31.1 (25.6-37.2) | 1,625 | 12.2 (9.2-16.1) | 861 | 17.1 (12.8-22.5) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | Insufficient data[2] | | 578 | 25.7 (17.8-35.6) | 595 | 8.9 (5.4-14.4) | 125 | 12.2 (5.1-26.7) |
| 30-39 | 609 | 2.0 (1.0-4.2) | 1,049 | 32.7 (26.1-40.1) | 926 | 16.7 (11.7-23.4) | 718 | 19.2 (14.1-25.6) |
| 40+ | Insufficient data[2] | | 235 | 50.3 (23.0-77.4) | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | | | |
| <High school | 0 | 0 (.-.) | Insufficient data[2] | | 210 | 7.4 (3.6-14.7) | Insufficient data[2] | |
| High school diploma | Insufficient data[2] | | 276 | 18.1 (9.7-31.3) | 360 | 10.0 (5.2-18.2) | Insufficient data[2] | |
| Some college | 0 | 0 (.-.) | 611 | 30.2 (22.5-39.2) | 508 | 14.4 (8.5-23.4) | 0 | 0 (.-.) |
| College graduate | 727 | 2.6 (1.3-5.1) | 869 | 42.8 (32.6-53.6) | 518 | 17.4 (10.6-27.2) | 754 | 19 (14.2-25.0) |
| **Insurance type** | | | | | | | | |
| Private | 426 | 1.5 (0.6-3.3) | 919 | 43.6 (35.0-52.6) | 592 | 17.5 (11.0-26.6) | 664 | 17.9 (13.0-24.0) |
| Medicaid | Insufficient data[2] | | 973 | 26.7 (19.4-35.7) | 900 | 10.1 (6.8-14.7) | 142 | 15.1 (6.3-31.8) |
| Other | 0 | 0 (.-.) | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | Insufficient data[2] | | 655 | 27.9 (19.6-38.1) | 648 | 13.5 (8.4-20.8) | Insufficient data[2] | |
| >100% FPL | 527 | 1.5 (0.7-3.2) | 1,221 | 34.0 (26.8-42.1) | 947 | 13.4 (9.3-19.0) | 772 | 17.9 (13.3-23.7) |
| **Nativity** | | | | | | | | |
| Non-US-born | Insufficient data[2] | | 902 | 25.1 (18.2-33.5) | 1,044 | 12.8 (9.0-17.9) | 501 | 13.1 (8.8-19.2) |
| US-born | 408 | 1.2 (0.5-2.8) | 1,021 | 39.5 (30.9-48.8) | 582 | 11.3 (6.9-18.0) | 359 | 29.9 (19.8-42.4) |
| **Marital status** | | | | | | | | |
| Unmarried | 0 | 0 (.-.) | 929 | 29.2 (22.0-37.7) | 762 | 11.0 (7.3-16.4) | Insufficient data[2] | |
| Married | 828 | 2.8 (1.5-5.2) | 994 | 33.1 (25.2-42.1) | 864 | 13.6 (9.2-19.6) | 789 | 17.7 (13.1-23.4) |
| **WIC participation** | | | | | | | | |
| No | 627 | 1.9 (0.9-3.8) | 1,008 | 36.2 (27.7-45.8) | 991 | 19.6 (13.8-27.0) | 718 | 17.5 (12.9-23.2) |
| Yes | Insufficient data[2] | | 900 | 26.6 (20.0-34.5) | 634 | 7.8 (4.8-12.3) | Insufficient data[2] | |
| **Disability status** | | | | | | | | |
| No | 627 | 1.8 (0.9-3.6) | 1,513 | 30.5 (24.4-37.3) | 926 | 8.3 (5.7-11.9) | 789 | 17.7 (13.0-23.5) |
| Yes | Insufficient data[2] | | 410 | 35.0 (22.8-49.6) | 662 | 32.7 (21.2-46.7) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 10. Prevalence of feeling physical symptoms due to treatment based on to racial/ethnic background by sociodemographic characteristics and race/ethnicity, MA PRAMS, 2019

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | Insufficient data[2] | | 403 | 6.3 (4.3-9.2) | 972 | 7.6 (5.4-10.7) | 129 | 2.3 (1.1-4.6) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | 0 | 0 (.-.) | Insufficient data[2] | | 0 | . (.-.) |
| 20-29 | Insufficient data[2] | | 178 | 7.4 (4.1-13.0) | 432 | 6.5 (3.8-10.9) | Insufficient data[2] | |
| 30-39 | 0 | 0 (.-.) | 213 | 6.8 (4.1-11.1) | 395 | 8.0 (4.8-13.1) | 111 | 2.8 (1.3-5.9) |
| 40+ | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | | | |
| <High school | 0 | 0 (.-.) | Insufficient data[2] | | 379 | 12.6 (7.1-21.4) | Insufficient data[2] | |
| High school diploma | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| Some college | Insufficient data[2] | | 136 | 5.6 (3.0-10.2) | 381 | 9.7 (5.5-16.3) | 0 | 0 (.-.) |
| College graduate | 0 | 0 (.-.) | 174 | 10.1 (5.9-16.9) | Insufficient data[2] | | 103 | 2.5 (1.2-5.4) |
| **Insurance type** | | | | | | | | |
| Private | 0 | 0 (.-.) | 206 | 9.7 (5.9-15.8) | 153 | 5.4 (2.5-11.5) | 103 | 2.6 (1.2-5.6) |
| Medicaid | Insufficient data[2] | | 181 | 4.7 (2.6-8.3) | 668 | 7.6 (4.9-11.6) | Insufficient data[2] | |
| Other | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | Insufficient data[2] | | 165 | 8.3 (4.5-14.8) | 542 | 9.6 (5.9-15.1) | 0 | 0 (.-.) |
| >100% FPL | 0 | 0 (.-.) | 222 | 5.8 (3.5-9.4) | 287 | 5.0 (2.7-9.0) | 129 | 2.7 (1.3-5.6) |
| **Nativity** | | | | | | | | |
| Non-US-born | 0 | 0 (.-.) | 117 | 3.2 (1.6-6.2) | 562 | 8.4 (5.3-13.0) | Insufficient data[2] | |
| US-born | Insufficient data[2] | | 286 | 10.7 (6.8-16.5) | 385 | 6.4 (3.7-11.0) | Insufficient data[2] | |
| **Marital status** | | | | | | | | |
| Unmarried | 0 | 0 (.-.) | 200 | 6.2 (3.5-10.7) | 591 | 8.0 (5.0-12.5) | 0 | 0 (.-.) |
| Married | Insufficient data[2] | | 203 | 6.5 (3.9-10.6) | 381 | 7.2 (4.3-11.7) | 129 | 2.5 (1.2-5.1) |
| **WIC participation** | | | | | | | | |
| No | 0 | 0 (.-.) | 267 | 10 (6.4-15.3) | 254 | 5.9 (3.1-10.9) | 103 | 2.4 (1.1-5.1) |
| Yes | Insufficient data[2] | | 137 | 3.8 (1.9-7.4) | 718 | 8.6 (5.7-12.7) | Insufficient data[2] | |
| **Disability status** | | | | | | | | |
| No | 0 | 0 (.-.) | 286 | 5.1 (3.3-7.8) | 658 | 6.2 (4.1-9.4) | 111 | 2.1 (1.0-4.6) |
| Yes | Insufficient data[2] | | 117 | 15.5 (7.5-29.3) | 314 | 15.3 (8.3-26.3) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 11. Prevalence of feeling physical symptoms due to treatment based on racial/ethnic background by sociodemographic characteristics, MA PRAMS, 2020

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | Insufficient data[2] | | 829 | 13.7 (9.6-19.1) | 836 | 6.4 (4.3-9.6) | 217 | 3.7 (2.0-6.5) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-) |
| 20-29 | 0 | 0 (.-) | 262 | 12.0 (6.8-20.4) | 520 | 7.8 (4.6-13.0) | 0 | 0 (.-) |
| 30-39 | Insufficient data[2] | | 396 | 12.5 (8.8-17.6) | 241 | 4.8 (2.2-10.0) | 217 | 5.2 (2.9-9.1) |
| 40+ | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-) |
| **Education** | | | | | | | | |
| <High school | 0 | 0 (.-) | 81 | 16.0 (6.6-34) | Insufficient data[2] | | 0 | 0 (.-) |
| High school diploma | 0 | 0 (.-) | 114 | 8.9 (4.0-18.6) | 262 | 7.1 (3.3-14.4) | Insufficient data[2] | |
| Some college | 0 | 0 (.-) | 215 | 10.8 (6.2-18.3) | 257 | 7.6 (3.9-14.4) | Insufficient data[2] | |
| College graduate | Insufficient data[2] | | 304 | 14.2 (9.0-21.7) | 196 | 7.8 (3.5-16.2) | 162 | 3.6 (1.9-6.6) |
| **Insurance type** | | | | | | | | |
| Private | Insufficient data[2] | | 220 | 12.5 (7.5-20.0) | 198 | 7.3 (3.3-15.3) | 201 | 4.7 (2.5-8.6) |
| Medicaid | Insufficient data[2] | | 565 | 14.9 (9.3-23.1) | 199 | 6 (3.7-9.7) | Insufficient data[2] | |
| Other | 0 | 0 (.-) | Insufficient data[2] | | 0 | 0 (.-) | 0 | 0 (.-) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 0 | 0 (.-) | 321 | 16.6 (10.5-25.2) | 451 | 9.0 (5.2-15.1) | Insufficient data[2] | |
| >100% FPL | Insufficient data[2] | | 481 | 13.8 (8.3-22.3) | 263 | 4.3 (2.0-8.8) | 168 | 3.4 (1.8-6.4) |
| **Nativity** | | | | | | | | |
| Non-US-born | Insufficient data[2] | | 331 | 8.4 (5.5-12.7) | 301 | 3.8 (1.9-7.5) | 142 | 2.9 (1.4-6.1) |
| US-born | Insufficient data[2] | | 498 | 23.2 (14.2-35.6) | 535 | 10.5 (6.3-17.0) | Insufficient data[2] | |
| **Marital status** | | | | | | | | |
| Unmarried | Insufficient data[2] | | 496 | 17.3 (10.3-27.6) | 626 | 8.9 (5.5-14.0) | 0 | 0 (.-) |
| Married | Insufficient data[2] | | 334 | 10.4 (7.0-15.4) | 210 | 3.5 (1.6-7.6) | 217 | 4.0 (2.2-7.1) |
| **WIC participation** | | | | | | | | |
| No | Insufficient data[2] | | 220 | 9.6 (5.8-15.6) | 383 | 8.7 (5.0-14.7) | 201 | 4.1 (2.2-7.4) |
| Yes | Insufficient data[2] | | 609 | 16.5 (10.6-24.8) | 453 | 5.3 (2.9-9.4) | Insufficient data[2] | |
| **Disability status** | | | | | | | | |
| No | Insufficient data[2] | | 563 | 11.0 (6.8-17.2) | 589 | 5.4 (3.3-8.7) | 217 | 4.0 (2.2-7.1) |
| Yes | Insufficient data[2] | | 240 | 26.2 (16.0-39.9) | 247 | 12.6 (6.1-24.4) | 0 | 0 (.-) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Table 12. Prevalence of feeling physical symptoms due to treatment based on racial/ethnic background by sociodemographic characteristics, MA PRAMS, 2021

| | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | Insufficient data[2] | | 855 | 13.9 (9.5-19.8) | 880 | 6.6 (4.5-9.7) | 250 | 5.0 (2.7-9.0) |
| **Age (years)** | | | | | | | | |
| <20 | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | Insufficient data[2] | | 278 | 12.4 (6.9-21.3) | 316 | 4.7 (2.3-9.3) | Insufficient data[2] | |
| 30-39 | Insufficient data[2] | | 368 | 11.5 (7.5-17.3) | 490 | 8.8 (5.3-14.3) | 197 | 5.3 (2.7-10.0) |
| 40+ | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | | | |
| <High school | Insufficient data[2] | | Insufficient data[2] | | 157 | 5.6 (2.3-12.6) | 0 | 0 (.-.) |
| High school diploma | Insufficient data[2] | | Insufficient data[2] | | 296 | 8.2 (4.2-15.5) | Insufficient data[2] | |
| Some college | Insufficient data[2] | | 255 | 12.7 (7.7-20.1) | 212 | 6.0 (2.5-13.9) | 0 | 0 (.-.) |
| College graduate | Insufficient data[2] | | 302 | 14.9 (6.8-29.6) | 185 | 6.2 (2.6-14.0) | 179 | 4.5 (2.4-8.6) |
| **Insurance type** | | | | | | | | |
| Private | Insufficient data[2] | | 236 | 11.2 (6.8-18.0) | 222 | 6.6 (3.0-13.7) | 143 | 3.9 (1.8-8.0) |
| Medicaid | Insufficient data[2] | | 603 | 16.6 (10.2-25.9) | 554 | 6.2 (3.7-10.1) | Insufficient data[2] | |
| Other | Insufficient data[2] | | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | Insufficient data[2] | | 399 | 17 (10.5-26.5) | 383 | 8.0 (4.3-14.3) | Insufficient data[2] | |
| >100% FPL | Insufficient data[2] | | 440 | 12.3 (6.8-21.2) | 437 | 6.2 (3.6-10.5) | 179 | 4.2 (2.2-7.9) |
| **Nativity** | | | | | | | | |
| Non-US-born | Insufficient data[2] | | 429 | 12.0 (6.5-21.2) | 557 | 6.8 (4.2-10.9) | 143 | 3.8 (1.7-8.3) |
| US-born | Insufficient data[2] | | 426 | 16.5 (10.5-24.8) | 323 | 6.3 (3.1-12.1) | 107 | 8.9 (3.7-20.1) |
| **Marital status** | | | | | | | | |
| Unmarried | Insufficient data[2] | | 468 | 14.7 (9.4-22.4) | 349 | 5.0 (2.7-9.1) | Insufficient data[2] | |
| Married | Insufficient data[2] | | 387 | 13.0 (6.8-23.2) | 531 | 8.3 (5.0-13.6) | 215 | 4.8 (2.6-8.9) |
| **WIC participation** | | | | | | | | |
| No | Insufficient data[2] | | 347 | 12.5 (6.0-24.0) | 504 | 9.9 (6.0-16.0) | 161 | 3.9 (2.0-7.8) |
| Yes | Insufficient data[2] | | 493 | 14.7 (9.6-21.7) | 376 | 4.6 (2.5-8.5) | Insufficient data[2] | |
| **Disability status** | | | | | | | | |
| No | Insufficient data[2] | | 565 | 11.4 (6.9-18.2) | 423 | 3.8 (2.2-6.5) | 214 | 4.8 (2.5-9.2) |
| Yes | Insufficient data[2] | | 290 | 25.1 (14.4-40.1) | 457 | 22.6 (13.2-35.9) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

Figure 11. Prevalence of reactions to racism during the 12 months before delivery, MA PRAMS 2019

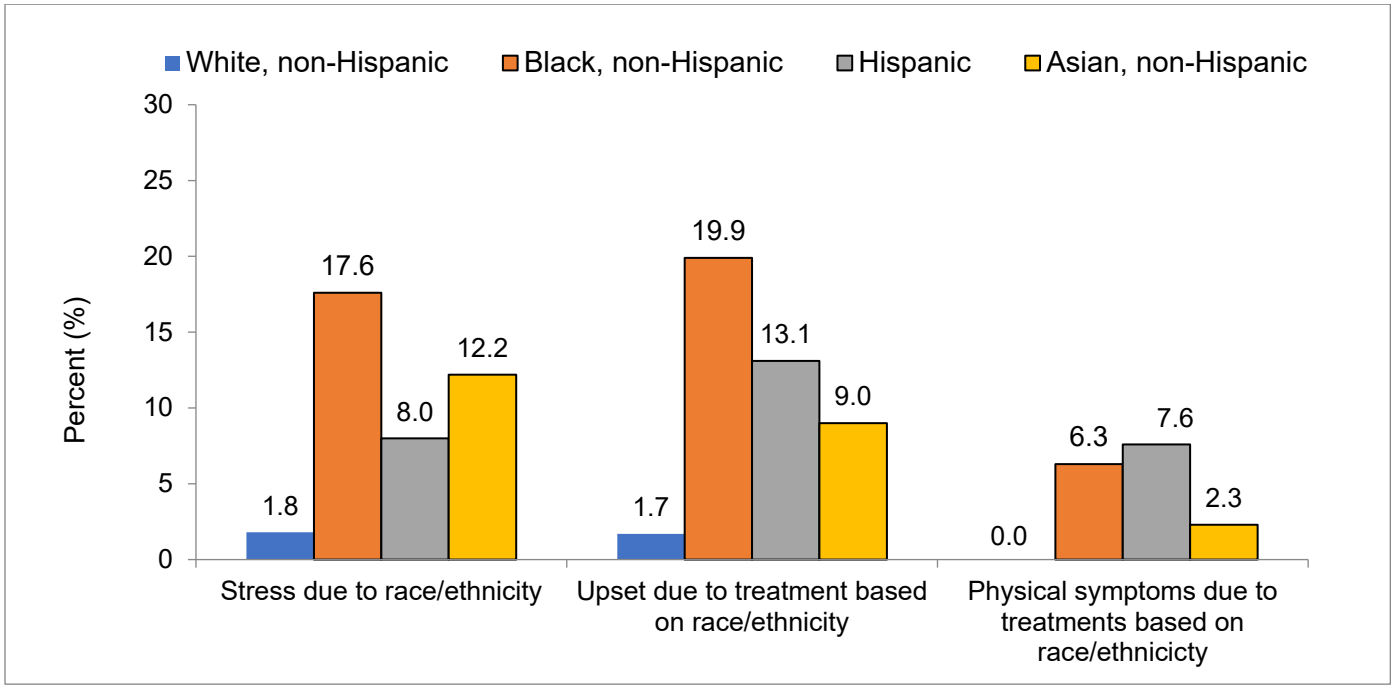



Figure 12. Prevalence of reactions to racism during the 12 months before delivery, MA PRAMS 2020-2021 combined

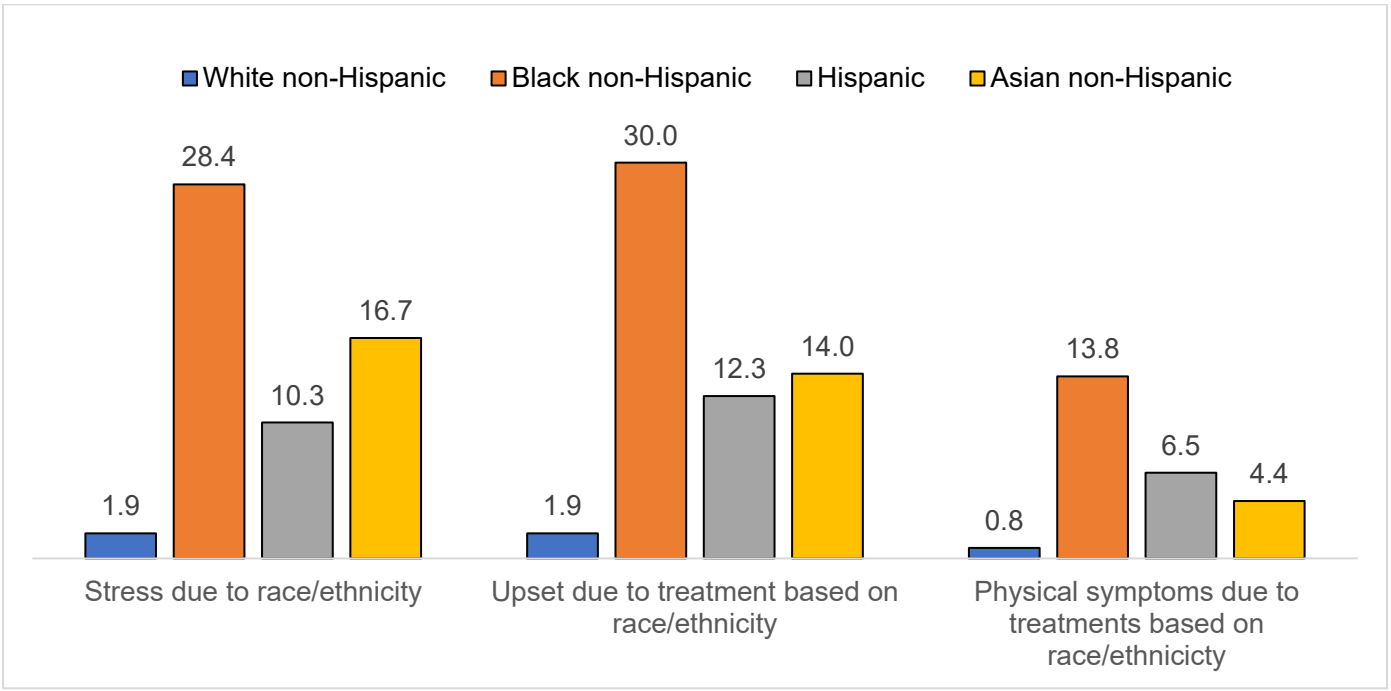


Figure 13. Prevalence of time spent thinking about race, MA PRAMS 2019.

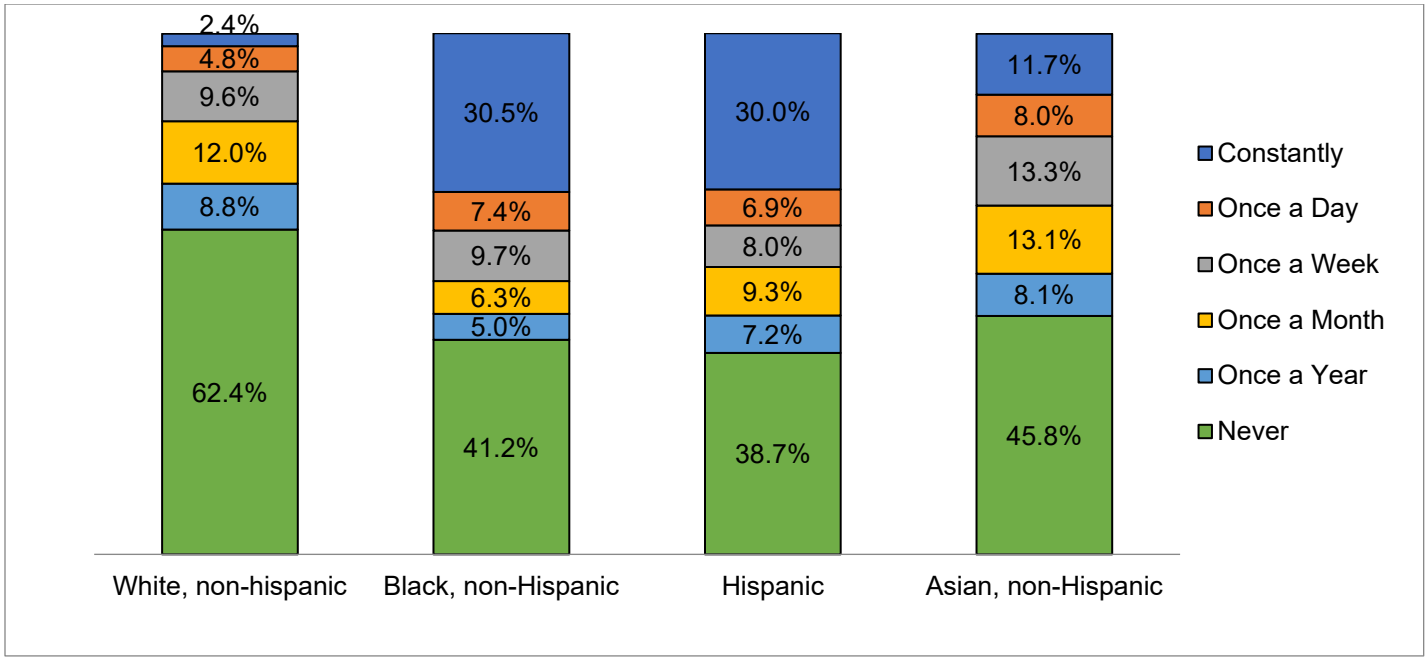
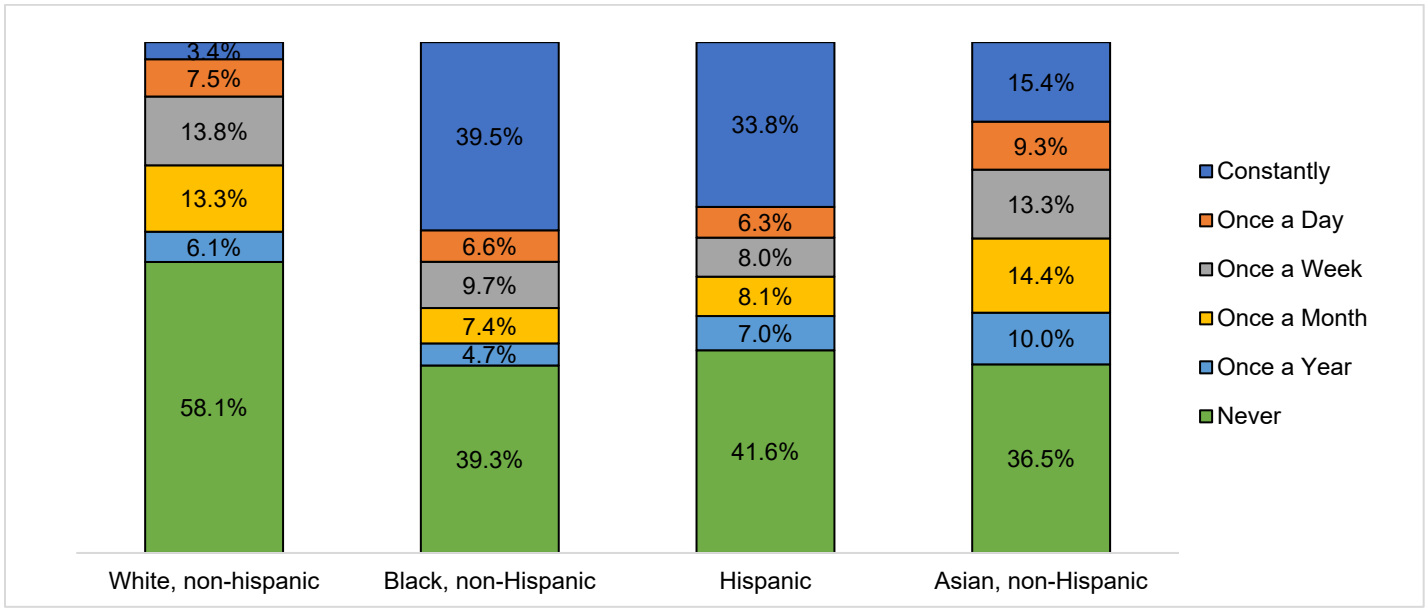



Figure 14. Prevalence of time spent thinking about race, MA PRAMS 2020-2021.



## Table 13. Prevalence of any maternity leave and type of leave, by sociodemographic characteristics, MA PRAMS, 2019

| Characteristic | Paid leave only | | Unpaid leave only | | Both paid and unpaid leave | | No leave | |
|---|---|---|---|---|---|---|---|---|
| | n[1] | Percentage (95% CI) | n[1] | Percentage (95% CI) | n[1] | Percentage (95% CI) | n[1] | Percentage (95% CI) |
| **Total** | 17,584 | 40.7 (36.8-44.6) | 17,136 | 39.6 (35.8-43.6) | 6,596 | 15.2 (12.6-18.4) | 1,936 | 4.5 (3.3-6.1) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 12,465 | 42.8 (37.4-48.4) | 10,869 | 37.4 (32.1-42.9) | 4,986 | 17.1 (13.4-21.7) | 778 | 2.7 (1.4-4.9) |
| Black, non-Hispanic | 1,246 | 31.5 (25.0-38.9) | 1,964 | 49.7 (42.5-57.0) | 517 | 13.1 (9.4-18.0) | 222 | 5.6 (3.2-9.8) |
| Hispanic | 1,681 | 28.7 (22.7-35.4) | 3,060 | 52.2 (45.0-59.2) | 647 | 11.0 (7.3-16.4) | 476 | 8.1 (4.9-13.2) |
| Asian, non-Hispanic | 1,847 | 54.4 (47.2-61.4) | 822 | 24.2 (18.6-30.9) | 403 | 11.9 (8.0-17.3) | 323 | 9.5 (5.9-15.1) |
| Other, non-Hispanic | 119 | 31.2 (14.7-54.6) | 195 | 51.1 (29.4-72.3) | Insufficient data[2] | | Insufficient data[2] | |
| **Age (years)** | | | | | | | | |
| <20 | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| 20-29 | 2,930 | 26.2 (20.4-33.0) | 6,652 | 59.5 (52.3-66.2) | 1,213 | 10.8 (7.2-15.9) | 395 | 3.5 (2.0-6.1) |
| 30-39 | 13,794 | 46.7 (41.8-51.7) | 9,421 | 31.9 (27.5-36.6) | 4,967 | 16.8 (13.4-20.9) | 1,362 | 4.6 (3.1-6.8) |
| 40+ | 818 | 34.1 (20.4-51.1) | 983 | 41 (26.3-57.5) | 415 | 17.3 (7.9-33.9) | 180 | 7.5 (2.5-20.5) |
| **Education** | | | | | | | | |
| <High school | 153 | 10.2 (4.3-22.1) | 1,058 | 70.2 (54.7-82.2) | 115 | 7.6 (3.0-17.9) | 181 | 12.0 (5.3-25.0) |
| High school diploma | 952 | 21.4 (13.9-31.3) | 2,683 | 60.2 (49.7-69.8) | 413 | 9.3 (4.6-17.7) | 409 | 9.2 (5.5-14.9) |
| Some college | 3,017 | 30.4 (23.6-38.3) | 5,532 | 55.8 (47.8-63.5) | 1,035 | 10.4 (6.6-16.0) | 330 | 3.3 (1.8-6.0) |
| College graduate | 12,845 | 49.2 (43.9-54.6) | 7,337 | 28.1 (23.6-33.2) | 4,889 | 18.7 (14.9-23.3) | 1,016 | 3.9 (2.3-6.5) |
| **Insurance type** | | | | | | | | |
| Private | 15,660 | 49.9 (45,0-54.8) | 8,783 | 28.0 (23.8 32.6) | 5,770 | 18.4 (14.9-22.4) | 1,163 | 3.7 (2.3-5.9) |
| Medicaid | 1,552 | 15.1 (11.2-20.1) | 7,464 | 72.7 (66.7-78.0) | 612 | 6.0 (3.4-10.3) | 633 | 6.2 (4.1-9.2) |
| Other | Insufficient data[2] | | 733 | 78.8 (60.0-90.2) | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 680 | 13.7 (9.1-20.1) | 3,578 | 72.1 (64.0-79.0) | 157 | 3.2 (1.4-7.2) | 548 | 11 (7.1-16.8) |
| >100% FPL | 16,758 | 44.6 (40.3-49.0) | 13,143 | 35.0 (30.9-39.2) | 6,349 | 16.9 (13.8-20.4) | 1,346 | 3.6 (2.4-5.4) |
| **Nativity** | | | | | | | 0 | (-) |
| Non-US-born | 3409 | 33.3 (28.0-39.1) | 4613 | 45.1 (39.2-51.2) | 1264 | 12.4 (8.7-17.2) | 942 | 9.2 (6.7-12.6) |
| US-born | 14175 | 42.9 (38.2-47.8) | 12523 | 37.9 (33.3-42.7) | 5331 | 16.1 (12.9-20.0) | 994 | 3 (1.8-5.1) |
| **Marital status** | | | | | | | | |
| Unmarried | 3,126 | 28.1 (21.9-35.1) | 6,415 | 57.6 (50.4-64.5) | 1,107 | 9.9 (6.7-14.5) | 491 | 4.4 (2.7-7.1) |
| Married | 14,458 | 45.0 (40.4-49.8) | 10,720 | 33.4 (29.1-38.0) | 5,489 | 17.1 (13.7-21.1) | 1,445 | 4.5 (3.0-6.6) |
| **WIC participation** | | | | | | | | |
| No | 15,914 | 47.7 (43.0-52.4) | 10,387 | 31.1 (26.9-35.7) | 5,841 | 17.5 (14.2-21.4) | 1,234 | 3.7 (2.4-5.8) |
| Yes | 1,541 | 16.2 (12.3-20.9) | 6,682 | 70.1 (64.1-75.4) | 627 | 6.6 (4.1-10.3) | 686 | 7.2 (4.9-10.5) |
| **Disability status** | | | | | | | | |
| No | 16,156 | 40.9 (36.9-45.1) | 15,296 | 38.7 (34.8-42.9) | 6,166 | 15.6 (12.8-19.0) | 1,870 | 4.7 (3.4-6.5) |
| Yes | 1,428 | 37.9 (25.9-51.6) | 1,840 | 48.9 (36.0-61.9) | 429 | 11.4 (6.0-20.7) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).

| Table 14. Prevalence of any maternity leave and type of leave, by sociodemographic characteristics, MA PRAMS, 2020 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Paid leave only** | | **Unpaid leave only** | | **Both paid and unpaid leave** | | **No leave** | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 18,726 | 47.5 (43.0-51.9) | 13,082 | 33.2 (29.1-37.5) | 5,172 | 13.1 (10.4-16.4) | 2,475 | 6.3 (4.5-8.7) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 13,488 | 50.2 (44.0-56.3) | 8,114 | 30.2 (24.7-36.3) | 3,844 | 14.3 (10.6-19.0) | 1,427 | 5.3 (3.1-9.0) |
| Black, non-Hispanic | 1,197 | 37.8 (31.2-44.8) | 1,446 | 45.6 (38.7-52.8) | 262 | 8.3 (5.1-13.1) | 265 | 8.3 (5.3-13.0) |
| Hispanic | 1,935 | 37.9 (30.5-46.0) | 2,245 | 44.0 (36.1-52.2) | 392 | 7.7 (4.4-13.0) | 531 | 10.4 (6.1-17.1) |
| Asian, non-Hispanic | 2,005 | 54.9 (47.6-62.0) | 1,043 | 28.5 (22.4-35.5) | 375 | 10.3 (6.6-15.6) | 230 | 6.3 (3.4-11.4) |
| **Age (years)** | | | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| 20-29 | 3,223 | 33.0 (25.1-42.0) | 4,819 | 49.4 (40.5-58.3) | 872 | 8.9 (5.0-15.4) | 843 | 8.6 (4.8-15) |
| 30-39 | 14,197 | 53.3 (47.8-58.7) | 7,026 | 26.4 (21.8-31.5) | 4,053 | 15.2 (11.7-19.6) | 1,363 | 5.1 (3.2-8.0) |
| 40+ | 1,306 | 47.2 (31.9-63.0) | 1,099 | 39.7 (25.3-56.2) | Insufficient data[2] | | 132 | 4.8 (1.0-19.2) |
| **Education** | | | | | | | | |
| <High school | 233 | 20.6 (10.3-36.9) | 395 | 35.0 (19.4-54.7) | Insufficient data[2] | | 403 | 35.7 (19.2-56.4) |
| High school diploma | 503 | 14.7 (7.5-26.9) | 2,457 | 71.7 (58.3-82.1) | Insufficient data[2] | | 352 | 10.3 (4.8-20.7) |
| Some college | 2,631 | 35.8 (26.6-46.3) | 3,558 | 48.5 (38.5-58.5) | 592 | 8.1 (4.3-14.7) | 562 | 7.7 (3.9-14.4) |
| College graduate | 15,359 | 56.5 (51.0-61.9) | 6,397 | 23.5 (19.2-28.5) | 4,266 | 15.7 (12.1-20.2) | 1,158 | 4.3 (2.4-7.4) |
| **Insurance type** | | | | | | | | |
| Private | 16,561 | 54.7 (49.5-59.8) | 7,821 | 25.8 (21.5-30.6)) | 4,648 | 15.3 (11.9-19.5) | 1,257 | 4.1 (2.5-6.7) |
| Medicaid | 1,753 | 21.3 (15.1-29.1) | 4,823 | 58.6 (49.6-67.1) | 491 | 6.0 (3.4-10.4) | 1,163 | 14.1 (8.7-22.1) |
| Other | 250 | 45.1 (13.6-81.1) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 332 | 9.9 (5.8-16.4) | 2,159 | 64.4 (50.9-75.9) | 162 | 4.8 (2.2-10.4) | 702 | 20.9 (11.1-35.9) |
| >100% FPL | 17,903 | 51.5 (46.7-56.3) | 10,412 | 30.0 (25.7-34.6) | 4,760 | 13.7 (10.7-17.4) | 1,665 | 4.8 (3.2-7.2) |
| **Nativity** | | | | | | | | |
| Non-US-born | 4,351 | 42.7 (36.3-49.4) | 3,886 | 38.1 (31.9-44.8) | 1,100 | 10.8 (7.0-16.2) | 857 | 8.4 (5.0-13.9) |
| US-born | 14,375 | 49.1 (43.6-54.7) | 9,197 | 31.4 (26.5-36.9) | 4,072 | 13.9 (10.6-18.1) | 1,618 | 5.5 (3.6-8.5) |
| **Marital status** | | | | | | | | |
| Unmarried | 2,780 | 33.1 (24.8-42.5) | 4,269 | 50.8 (41.3-60.3) | 650 | 7.7 (4.1-14.3) | 699 | 8.3 (4.7-14.3) |
| Married | 15,946 | 51.3 (46.3-56.3) | 8,813 | 28.4 (24.1-33.1) | 4,521 | 14.6 (11.3-18.5) | 1,776 | 5.7 (3.8-8.6) |
| **WIC participation** | | | | | | | | |
| No | 16,936 | 53.2 (48.1-58.2) | 8,697 | 27.3 (23.0-32.1) | 4,765 | 15.0 (11.7-19.0) | 1,438 | 4.5 (2.9-7.0) |
| Yes | 1,790 | 23.6 (16.7-32.3) | 4,358 | 57.4 (48.0-66.3) | 407 | 5.4 (3.2-8.8) | 1,037 | 13.7 (8.2-21.8) |
| **Disability status** | | | | | | | | |
| No | 17,483 | 48.5 (43.9-53.2) | 11,344 | 31.5 (27.3-35.9) | 4,968 | 13.8 (10.8-17.4) | 2,258 | 6.3 (4.4-8.9) |
| Yes | 1,243 | 37.1 (24.0-52.4) | 1,722 | 51.4 (36.3-66.2) | 203 | 6.1 (2.1-16.2) | Insufficient data[2] | |
| [1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5). | | | | | | | | |

| Table 15. Prevalence of any maternity leave and type of leave, by sociodemographic characteristics, MA PRAMS, 2021 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Paid leave only** | | **Unpaid leave only** | | **Both paid and unpaid leave** | | **No leave** | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 28,236 | 66.2 (61.8-70.3) | 8,713 | 20.4 (17.0-24.3) | 3,457 | 8.1 (5.9-11.0) | 2,267 | 5.3 (3.7-7.6) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 20,015 | 68.2 (62.2-73.6) | 5,268 | 17.9 (13.7-23.2) | 2,851 | 9.7 (6.7-14.0) | 1,221 | 4.2 (2.3-7.5) |
| Black, non-Hispanic | 2,006 | 59.9 (52.2-67.1) | 902 | 26.9 (20.5-34.5) | 228 | 6.8 (4.1-11.1) | 214 | 6.4 (3.4-11.7) |
| Hispanic | 2,999 | 57.0 (48.5-65.1) | 1,432 | 27.2 (20.3-35.5) | 252 | 4.8 (2.3-9.6) | 581 | 11.0 (6.7-17.7) |
| Asian, non-Hispanic | 2,228 | 69.3 (61.7-76.0) | 609 | 19.0 (13.4-26.1) | 126 | 3.9 (1.9-7.9) | 251 | 7.8 (4.6-13.1) |
| **Age (years)** | | | | | | | | |
| <20 | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| 20-29 | 4,459 | 48.5 (39.2-57.9) | 3,011 | 32.8 (24.6-42.0) | 781 | 8.5 (4.1-16.9) | 942 | 10.2 (5.9-17.2) |
| 30-39 | 22,538 | 71.0 (66.0-75.6) | 5,351 | 16.9 (13.2-21.3) | 2,675 | 8.4 (5.9-11.9) | 1,159 | 3.7 (2.2-6.1) |
| 40+ | 1,239 | 76.2 (53.5-89.9) | 250 | 15.4 (5.1-38.2) | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | | | |
| <High school | 519 | 44.6 (24.0-67.2) | 329 | 28.3 (14.6-47.7) | Insufficient data[2] | | 286 | 24.5 (10.6-47) |
| High school diploma | 1,131 | 35.7 (22.3-51.6) | 1,356 | 42.8 (27.7-59.3) | Insufficient data[2] | | 660 | 20.8 (9.6-39.3) |
| Some college | 3,598 | 52.2 (41.2-63.0) | 2,580 | 37.4 (27.3-48.8) | 286 | 4.1 (1.3-12.1) | 429 | 6.2 (3.2-11.8) |
| College graduate | 22,584 | 74.0 (69.0-78.4) | 3,964 | 13.0 (9.8-17.0) | 3,116 | 10.2 (7.3-14.1) | 863 | 2.8 (1.6-5.0) |
| **Insurance type** | | | | | | | | |
| Private | 23,786 | 73.8 (68.9-78.2) | 4,489 | 13.9 (10.6-18.1) | 3,219 | 10 (7.2-13.8) | 736 | 2.3 (1.2-4.2) |
| Medicaid | 3,311 | 41.2 (31.9-51.1) | 3,382 | 42.1 (32.6-52.1) | 104 | 1.3 (0.5-3.1) | 1,246 | 15.5 (9.7-23.8) |
| Other | 703 | 47.5 (25.7-70.2) | 578 | 39.0 (19.3-63.1) | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 1,160 | 39.4 (26.3-54.2) | 1,269 | 43.1 (29.6-57.8) | Insufficient data[2] | | 473 | 16.1 (8.6-28) |
| >100% FPL | 26,809 | 68.2 (63.6-72.5) | 7,285 | 18.5 (15.1-22.6) | 3,417 | 8.7 (6.3-11.9) | 1,776 | 4.5 (2.9-6.9) |
| **Nativity** | | | | | | | | |
| Non-US-born | 5,796 | 59.1 (51.9-65.9) | 2,205 | 22.5 (17.2-28.8) | 459 | 4.7 (2.7-8.1) | 1,349 | 13.8 (9.1-20.2) |
| US-born | 22,440 | 68.3 (63.0-73.2) | 6,508 | 19.8 (15.7-24.6) | 2,997 | 9.1 (6.4-12.9) | 918 | 2.8 (1.5-5.2) |
| **Marital status** | | | | | | | | |
| Unmarried | 4,865 | 51.0 (40.9-61.0) | 3,325 | 34.8 (25.8-45.1) | 736 | 7.7 (3.3-16.9) | 617 | 6.5 (3.4-12.0) |
| Married | 23,371 | 70.5 (65.8-74.9) | 5,388 | 16.3 (12.9-20.3) | 2,720 | 8.2 (5.9-11.4) | 1,650 | 5.0 (3.2-7.6) |
| **WIC participation** | | | | | | | | |
| No | 25,180 | 70.5 (65.7-74.9) | 6,052 | 16.9 (13.4-21.1) | 3,192 | 8.9 (6.4-12.3) | 1,298 | 3.6 (2.1-6.1) |
| Yes | 3,019 | 43.8 (34.1-53.9) | 2,661 | 38.6 (29.2-48.9) | 247 | 3.6 (1.0-12.4) | 969 | 14.1 (8.9-21.5) |
| **Disability status** | | | | | | | | |
| No | 26,454 | 68.2 (63.6-72.4) | 7,134 | 18.4 (15.0-22.3) | 3,304 | 8.5 (6.1-11.7) | 1,921 | 4.9 (3.3-7.3) |
| Yes | 1,644 | 44.9 (31.4-59.3) | 1,515 | 41.4 (27.8-56.5) | Insufficient data[2] | | 346 | 9.5 (3.9-21.1) |
| [1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5). | | | | | | | | |

## Table 16. Prevalence of reasons for no leave by race/ethnicity, MA PRAMS, 2019

| | Total | | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Reasons for not taking leave** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| Could not afford | 10,333 | 24.8 (21.5-28.5) | 6,592 | 23.2 (18.8-28.3) | 1,266 | 35.8 (28.6-43.8) | 1,524 | 27.1 (21.1-34.0) | 641 | 20.4 (15.0-27.2) |
| Afraid to lose job | 5,868 | 14.3 (11.6-17.5) | 4,063 | 14.5 (10.9-19.1) | 625 | 18.1 (12.0-26.4) | 529 | 9.4 (5.9-14.7) | 584 | 18.4 (13.4-24.8) |
| Too much work | 4,676 | 11.4 (9.0-14.4) | 3,322 | 12.0 (8.7-16.2) | 327 | 9.4 (4.6-18.3) | 326 | 5.8 (3.3-10.0) | 549 | 17.6 (12.6-23.9) |
| No paid leave | 12,898 | 31.2 (27.5-35.1) | 8,403 | 30.0 (25.1-35.5) | 1,374 | 38.7 (31.3-46.6) | 2,139 | 37.2 (30.5-44.5) | 634 | 20.3 (15.0-27.0) |
| No flexible schedule | 6,553 | 16.0 (13.3-19.1) | 3,687 | 13.2 (9.8-17.6) | 879 | 25.2 (19.5-31.8) | 1,198 | 21.6 (16.2-28.2) | 525 | 16.9 (12.1-23.0) |
| Not enough leave time | 9,990 | 24.4 (21.0-28.2) | 6,477 | 23.2 (18.7-28.5) | 1,317 | 37.6 (30.2-45.6) | 1,360 | 24.7 (18.8-31.8) | 644 | 20.8 (15.4-27.3) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).[2]Insufficient data to report (0<n<5)

## Table 17. Prevalence of reasons for no leave by race/ethnicity, MA PRAMS, 2020

| | Total | | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Reasons for not taking leave** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| Could not afford | 8,188 | 21.2 (17.8-25.1) | 5,077 | 19.0 (14.5-24.4) | 786 | 26.5 (20.6-33.5) | 1,352 | 28.3 (21.4-36.4) | 916 | 26.5 (20.3-33.8) |
| Afraid to lose job | 6,992 | 18.1 (15.0-21.7) | 4,344 | 16.2 (12.2-21.3) | 640 | 21.6 (16.2-28.3) | 1,003 | 21.0 (15.0-28.6) | 927 | 26.4 (20.3-33.7) |
| Too much work | 3,721 | 9.6 (7.4-12.6) | 2,579 | 9.6 (6.6-13.8) | 205 | 7.0 (4.1-11.6) | 451 | 9.5 (5.6-15.9) | 412 | 11.9 (7.9-17.6) |
| No paid leave | 10,839 | 28.1 (24.2-32.4) | 7,421 | 27.7 (22.5-33.7) | 929 | 31.9 (25.4-39.2) | 1,484 | 30.9 (23.6-39.3) | 826 | 23.9 (18.1-30.9) |
| No flexible schedule | 5,557 | 14.5 (11.6-17.9) | 3,232 | 12.1 (8.5-17.0) | 527 | 18.0 (13.0-24.2) | 1,163 | 24.9 (18.2-32.9) | 558 | 16.2 (11.4-22.4) |
| Not enough leave time | 6,886 | 18.0 (14.9-21.6) | 4,664 | 17.5 (13.4-22.5) | 801 | 27.0 (21.0-34.0) | 712 | 15.5 (10.3-22.7) | 630 | 18.3 (13.2-25.0) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).[2]Insufficient data to report (0<n<5)

## Table 18. Prevalence of reasons for no leave by race/ethnicity, MA PRAMS, 2021

| | Total | | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Reasons for not taking leave** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| Could not afford | 7,464 | 18.3 (15.0-22.2) | 4,419 | 15.6 (11.0-20.3) | 740 | 24.1 (17.0-31.2) | 1,284 | 25.8 (18.3-33.3) | 592 | 19.6 (13.1-26.1) |
| Afraid to lose job | 4,285 | 10.5 (8.0-13.6) | 2,671 | 9.5 (5.7-13.2) | 402 | 13.1 (7.8-18.4) | 656 | 13.0 (7.2-18.8) | 538 | 17.8 (11.5-24.1) |
| Too much work | 5,299 | 13.0 (10.2-16.4) | 3,683 | 13.0 (9.0-17.1) | 330 | 10.8 (5.9-15.7) | 511 | 10.2 (5.1-15.2) | 486 | 16.1 (10.6-21.6) |
| No paid leave | 8,748 | 21.3 (17.8-25.4) | 5,454 | 19.3 (14.3-24.3) | 644 | 21.0 (14.5-27.4) | 1,378 | 27.3 (19.6-34.9) | 663 | 21.9 (15.2-28.6) |
| No flexible schedule | 6,181 | 15.1 (12.1-18.7) | 3,922 | 13.9 (9.7-18.1) | 413 | 13.4 (8.3-18.6) | 1,129 | 22.1 (15.0-29.1) | 270 | 8.9 (4.7-13.2) |
| Not enough leave time | 6,293 | 15.5 (12.4-19.2) | 4,215 | 15.0 (10.5-19.5) | 551 | 18.3 (11.8-24.8) | 827 | 16.8 (10.4-23.3) | 413 | 13.7 (8.2-19.2) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5).[2]Insufficient data to report (0<n<5)

Table 19. Prevalence of depression screening and self-reported postpartum depressive symptoms by sociodemographic characteristics, MA PRAMS, 2019

| | Depression screening during prenatal care | | Depression screening during postpartum visit | | Self-reported postpartum depressive symptoms[3] | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 56,364 | 86.9 (84.6-88.9) | 57,556 | 87.8 (85.7-89.6) | 6,732 | 10.2 (8.6-12.0) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 33,677 | 86.1 (82.4-89.1) | 35,550 | 90.4 (87.1-92.9) | 2,726 | 6.9 (4.8-9.7) |
| Black, non-Hispanic | 5,785 | 91.4 (88.1-93.9) | 5,463 | 85.2 (79.8-89.3) | 1,072 | 16.7 (13.1-21.1) |
| Hispanic | 11,291 | 90.3 (87.0-92.9) | 10,434 | 81.4 (77.3-85.0) | 1,786 | 13.9 (10.8-17.7) |
| Asian, non-Hispanic | 4,409 | 78.6 (73.6-82.9) | 4,950 | 87.0 (82.6-90.4) | 1,015 | 17.7 (13.7-22.4) |
| Other, non-Hispanic | 492 | 86.6 (66.6-95.5) | 525 | 83.7 (66.3-93.1) | 94 | 15.0 (6.4-31.5) |
| **Age (years)** | | | | | | |
| <20 | 972 | 93.3 (76.1-98.4) | 754 | 72.4 (52.7-86.1) | 144 | 13.9 (5.1-32.8) |
| 20-29 | 18,452 | 88.9 (85.1-91.9) | 17,629 | 84.3 (80.2-87.8) | 2,725 | 13 (10.1-16.6) |
| 30-39 | 33,604 | 84.9 (81.6-87.7) | 36,005 | 89.7 (87.0-91.9) | 3,701 | 9.1 (7.2-11.5) |
| 40+ | 3,336 | 96.0 (91.9-98.0) | 3,169 | 90.4 (81.6-95.2) | 162 | 4.6 (2.3-8.9) |
| **Education** | | | | | | |
| <High school | 4,091 | 87.8 (78.6-93.4) | 3,544 | 73.1 (63.6-80.8) | 662 | 13.7 (9.2-19.9) |
| High school diploma | 8,520 | 89.1 (84.2-92.6) | 7,706 | 80.5 (74.2-85.6) | 1,408 | 14.7 (10.4-20.2) |
| Some college | 13,965 | 91.1 (86.6-94.2) | 14,117 | 89.7 (85.6-92.7) | 2,051 | 1.03 (9.5-17.6) |
| College graduate | 28,148 | 83.9 (80.2-87.1) | 30,609 | 90.9 (87.8-93.2) | 2,309 | 6.8 (5.0-9.1) |
| **Insurance type** | | | | | | |
| Private | 32,949 | 84.7 (81.3-87.6) | 35,987 | 91.6 (88.9-93.7) | 2,746 | 6.9 (5.2-9.2) |
| Medicaid | 20,580 | 91.3 (88.2-93.6) | 19,017 | 83.2 (79.4-86.4) | 3,335 | 14.5 (11.6-18.0) |
| Other | 1,464 | 86.0 (66.9-94.9) | 1,390 | 78.7 (61.5-89.5) | 190 | 10.8 (4.8-22.5) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 11,502 | 89.8 (85.4-92.9) | 10,509 | 80.4 (7.05-84.8) | 2,074 | 15.7 (12.1-20.2) |
| >100% FPL | 42,573 | 86.1 (83.3-88.6) | 45,164 | 90.3 (87.9-92.2) | 4,241 | 8.4 (6.7-10.5) |
| **Nativity** | | | | | | |
| Non-US-born | 16,125 | 87.4 (83.9-90.2) | 15,862 | 84.1 (80.7-87.0) | 2,891 | 15.2 (12.5-18.4) |
| US-born | 40,213 | 86.7 (83.7-89.2) | 41,669 | 89.3 (86.5-91.5) | 3,841 | 8.2 (6.3-10.5) |
| **Marital status** | | | | | | |
| Unmarried | 18,772 | 90.3 (86.5-93.1) | 17,466 | 83.2 (79.0-86.7) | 2,712 | 12.9 (10.0-16.4) |
| Married | 37,591 | 85.3 (82.3-87.9) | 40,090 | 89.9 (87.5-91.9) | 4,020 | 8.9 (7.2-11.1) |
| **WIC participation** | | | | | | |
| No | 38,267 | 85.6 (82.6-88.2) | 40,472 | 90.3 (87.7-92.3) | 3,735 | 8.3 (6.5-10.5) |
| Yes | 17,837 | 89.9 (86.5-92.6) | 16,738 | 82.3 (78.3-85.7) | 2,997 | 14.6 (11.6-18.1) |
| **Disability status** | | | | | | |
| No | 49,813 | 86.5 (84.0-88.7) | 51,389 | 87.8 (85.5-89.8) | 5,202 | 8.8 (7.3-10.7) |
| Yes | 6,075 | 90.5 (84.6-94.3) | 5,967 | 88.1 (81.1-92.7) | 1,479 | 21.7 (15.5-29.6) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]reported 'Always or Often'

Table 20. Prevalence of depression screening and self-reported postpartum depressive symptoms by sociodemographic characteristics, MA PRAMS, 2020

| | Depression screening during prenatal care | | Depression screening during postpartum visit | | Self-reported postpartum depressive symptoms[3] | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 54,096 | 86.8 (84.3-89.0) | 52,959 | 84.2 (81.6-86.5) | 6,314 | 10.0 (8.1-12.2) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 30,831 | 85.9 (81.6-89.3) | 32,258 | 87.9 (83.7-91.1) | 2,635 | 7.2 (4.7-10.9) |
| Black, non-Hispanic | 5,620 | 91.3 (87.8-93.9) | 4,753 | 77.9 (73.1-82.1) | 1,005 | 16.3 (12.0-21.7) |
| Hispanic | 11,923 | 90.7 (87.0-93.4) | 9,986 | 77.1 (72.2-81.3) | 1,261 | 9.7 (6.9-13.3) |
| Asian, non-Hispanic | 4,532 | 77.9 (72.6-82.4) | 5,012 | 84.9 (80.0-88.7) | 1,199 | 20.0 (15.7-25.2) |
| Other, non-Hispanic | 322 | 79.2 (51.6-93.1) | 341 | 91.3 (71.1-97.8) | 109 | 29.2 (12.4-54.7) |
| **Age (years)** | | | | | | |
| <20 | 1,279 | 88.3 (66.5-96.6) | 1,063 | 76.6 (56.3-89.3) | 305 | 21.9 (9.5-42.8) |
| 20-29 | 18,596 | 91.5 (87.4-94.4) | 16,380 | 80.0 (74.8-84.5) | 2,546 | 12.4 (9.0-16.9) |
| 30-39 | 30,788 | 84.3 (80.7-87.3) | 31,900 | 86.3 (83.0-89.1) | 2,922 | 7.9 (5.8-10.7) |
| 40+ | 3,434 | 85.7 (73.4-92.9) | 3,616 | 87.9 (79.7-93.1) | 541 | 13.1 (6.6-24.4) |
| **Education** | | | | | | |
| <High school | 4,147 | 87.9 (79.6-93.1) | 3,464 | 74.4 (64.5-82.3) | 750 | 16.0 (9.8-25.0) |
| High school diploma | 8,447 | 90.8 (84.0-94.9) | 6,937 | 73.3 (64.8-80.3) | 1,448 | 15.1 (9.7-22.9) |
| Some college | 11,730 | 90.9 (84.3-94.9) | 10,710 | 82.1 (74.9-87.5) | 1,533 | 11.7 (7.3-18.5) |
| College graduate | 28,555 | 83.8 (80.0-86.9) | 30,893 | 89.4 (86.3-91.9) | 2,401 | 6.9 (5.1-9.3) |
| **Insurance type** | | | | | | |
| Private | 31,146 | 85.3 (81.7-88.3) | 33,021 | 88.5 (85.2-91.1) | 2,676 | 7.2 (5.3-9.5) |
| Medicaid | 20,796 | 92.3 (89.0-94.7) | 17,904 | 79.9 (75.4-83.8) | 3,233 | 14.3 (10.7-18.9) |
| Other | 727 | 62.9 (36.3-83.4) | 1,009 | 78.6 (57.4-90.9) | Insufficient data[2] | |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 9,631 | 85.0 (77.9-90.1) | 7,958 | 68.1 (60.5-74.7) | 1,690 | 14.4 (9.9-20.3) |
| >100% FPL | 40,319 | 86.8 (83.8-89.3) | 42,045 | 88.6 (85.8-90.9) | 3,863 | 8.1 (6.2-10.6) |
| **Nativity** | | | | | | |
| Non-US-born | 18,469 | 86.4 (82.8-89.3) | 17,176 | 80.1 (76.3-83.4) | 3,114 | 14.4 (11.3-18.2) |
| US-born | 35,627 | 87.1 (83.5-89.9) | 35,783 | 86.3 (82.7-89.2) | 3,200 | 7.7 (5.6-10.6) |
| **Marital status** | | | | | | |
| Unmarried | 17,366 | 90.9 (86.3-94.1) | 15,219 | 79.4 (73.8-84.0) | 2,699 | 14.1 (10.3-19) |
| Married | 36,730 | 85.0 (81.8-87.7) | 37,740 | 86.3 (83.3-88.8) | 3,615 | 8.2 (6.3-10.7) |
| **WIC participation** | | | | | | |
| No | 35,349 | 85.3 (82.0-88.1) | 36,982 | 86.8 (83.7-89.4) | 3,021 | 7.1 (5.3-9.3) |
| Yes | 18,517 | 93.5 (90.3-95.8) | 15,895 | 78.6 (73.6-82.9) | 3,256 | 16 (11.9-21.1) |
| **Disability status** | | | | | | |
| No | 47,704 | 86.9 (84.3-89.1) | 47,501 | 84.9 (82.1-87.3) | 4,210 | 7.5 (5.9-9.4) |
| Yes | 5,455 | 85.0 (73.2-92.2) | 5,290 | 78.2 (68.7-85.5) | 1,982 | 29.2 (19.9-40.7) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]reported 'Always or Often'

Table 21. Prevalence of depression screening and self-reported postpartum depressive symptoms by sociodemographic characteristics, MA PRAMS, 2021

| | Depression screening during prenatal care | | Depression screening during postpartum visit | | Self-reported postpartum depressive symptoms[3] | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 58,198 | 88.6 (86.2-90.6) | 57,865 | 88.3 (86.0-90.2) | 6,789 | 10.4 (8.4-12.7) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 34,598 | 87.8 (84.0-90.8) | 35,712 | 91.3 (87.8-93.9) | 3,351 | 8.6 (5.9-12.3) |
| Black, non-Hispanic | 5,535 | 89.8 (85.6-92.8) | 5,359 | 86.1 (81.3-89.8) | 940 | 15.0 (11.2-19.7) |
| Hispanic | 12,089 | 91.0 (87.3-93.7) | 10,696 | 79.9 (75.4-83.8) | 1,440 | 10.8 (7.9-14.5) |
| Asian, non-Hispanic | 4,091 | 82.6 (77.0-87.1) | 4,431 | 88.5 (83.7-92.1) | 789 | 15.7 (11.6-20.8) |
| Other, non-Hispanic | 339 | 100 (.-.) | 250 | 82.4 (49.7-95.7) | Insufficient data[2] | |
| **Age (years)** | | | | | | |
| <20 | 959 | 89.1 (73.5-96.0) | 820 | 76.2 (58.3-88.0) | 157 | 14.6 (6.1-31.0) |
| 20-29 | 16,580 | 88.6 (84.3-91.9) | 15,978 | 86.0 (81.3-89.6) | 1,921 | 10.4 (7.3-14.5) |
| 30-39 | 38,603 | 88.7 (85.5-91.2) | 39,217 | 90.2 (87.4-92.4) | 4,372 | 10.0 (7.6-13.1) |
| 40+ | 2,056 | 86.7 (70.6-94.6) | 1,850 | 76.4 (60.0-87.5) | 338 | 14.5 (6.9-28) |
| **Education** | | | | | | |
| <High school | 3,999 | 89.3 (78.9-94.9) | 3,489 | 77.9 (69.9-84.2) | 729 | 16.3 (10.0-25.3) |
| High school diploma | 8,800 | 91.8 (86.5-95.2) | 7,991 | 84.4 (77.4-89.5) | 1,561 | 16.4 (10.4-24.9) |
| Some college | 11,805 | 92.3 (87.0-95.5) | 10,952 | 84.7 (78.1-89.6) | 1,672 | 12.9 (8.5-19.1) |
| College graduate | 32,293 | 86.3 (82.7-89.2) | 34,282 | 91.9 (89.0-94.1) | 2,791 | 7.5 (5.4-10.3) |
| **Insurance type** | | | | | | |
| Private | 34,111 | 87.0(83.5-89.8) | 36,447 | 93.4 (90.8-95.3) | 2,881 | 7.4 (5.3-10.1) |
| Medicaid | 20,397 | 90.8 (87.1-93.5) | 17,837 | 79.4 (74.6-83.5) | 3,208 | 14.3 (10.7-18.8) |
| Other | 1,734 | 91.0 (72.9-97.4) | 1,707 | 87.9 (71.5-95.5) | 454 | 23.4 (9.6-46.8) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 10,206 | 90.0 (84.5-93.7) | 9,303 | 80.8 (74.4-85.8) | 2,188 | 19.0 (13.7-25.8) |
| >100% FPL | 44,848 | 88.2 (85.3-90.5) | 46,265 | 90.8 (88.2-92.8) | 4,252 | 8.3 (6.4-10.8) |
| **Nativity** | | | | | | |
| Non-US-born | 18,348 | 89.4 (86.2-91.9) | 16,933 | 81.3 (77.0-84.9) | 2,494 | 12.0 (9.3-15.3) |
| US-born | 39,850 | 88.2 (85.0-90.9) | 40,932 | 91.5 (88.8-93.6) | 4,295 | 9.6 (7.2-12.7) |
| **Marital status** | | | | | | |
| Unmarried | 18,175 | 88.4 (83.5-91.9) | 16,913 | 82.8 (77.8-86.9) | 3,012 | 14.7 (10.6-20.1) |
| Married | 40,023 | 88.7 (85.8-91.0) | 40,952 | 90.7 (88.2-92.7) | 3,777 | 8.4 (6.5-10.8) |
| **WIC participation** | | | | | | |
| No | 40,771 | 87.6 (84.5-90.1) | 42,118 | 90.5 (87.8-92.7) | 3,671 | 7.9 (5.9-10.4) |
| Yes | 17,224 | 91.6 (87.7-94.4) | 15,611 | 82.6 (78.1-86.3) | 3,118 | 16.5 (12.4-21.8) |
| **Disability status** | | | | | | |
| No | 50,293 | 87.9 (85.3-90.2) | 51,455 | 89.6 (87.4-91.5) | 4,094 | 7.1 (5.5-9.2) |
| Yes | 7,068 | 93.5 (88.3-96.5) | 6,067 | 79.2 (69.3-86.5) | 2,634 | 34.4 (25.5-44.5) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]reported 'Always or Often'

## Table 22. Prevalence of different types of social support after delivery by sociodemographic characteristics, MA PRAMS, 2019

| | Loan money[3] | | Bed rest[4] | | Someone to talk with[5] | | Help when tired/ frustrated[6] | | Give ride[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 51,471 | 79.9 (77.5-82.1) | 55,928 | 86.7 (84.6-88.5) | 56,698 | 88.0 (86.1-89.7) | 56,998 | 88.5 (86.6-90.2) | 56,951 | 88.3 (86.3-90.0) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 34,168 | 87.5 (83.9-90.4) | 35,849 | 91.8 (88.7-94.2) | 36,195 | 92.7 (89.8-94.9) | 36,200 | 93.0 (90.0-95.2) | 35,830 | 91.8 (88.7-94.2) |
| Black, non-Hispanic | 4,043 | 65.9 (59.9-71.5) | 5,038 | 81.6 (77.0-85.4) | 5,127 | 83.8 (79.4-87.4) | 5,162 | 84.2 (79.9-87.7) | 5,216 | 84.9 (80.7-88.3) |
| Hispanic | 9,092 | 73.5 (68.8-77.6) | 9,702 | 78.1 (73.7-81.9) | 10,015 | 80.6 (76.3-84.3) | 9,970 | 80.3 (76.0-84.0) | 10,398 | 83.5 (79.5-86.9) |
| Asian, non-Hispanic | 3,133 | 56.8 (51.1-62.4) | 4,130 | 74.7 (69.3-79.4) | 4,139 | 75.2 (69.9-79.8) | 4,506 | 80.5 (75.5-84.7) | 4,285 | 77.1 (71.9-81.6) |
| Other, non-Hispanic | 399 | 69.1 (49.5-83.6) | 500 | 89.3 (71.6-96.5) | 474 | 84.8 (65.9-94.2) | 449 | 80.3 (60.7-91.5) | 474 | 84.8 (65.9-94.2) |
| **Age (years)** | | | | | | | | | | |
| <20 | 725 | 69.6 (47.2-85.4) | 876 | 84.2 (64.7-93.9) | 840 | 80.7 (60.9-91.8) | 882 | 84.8 (65.4-94.2) | 904 | 86.9 (69.3-95.1) |
| 20-29 | 15,056 | 74.0 (69.2-78.3) | 17,537 | 86.2 (82.7-89.1) | 17,721 | 87.3 (83.7-90.2) | 17,678 | 87.0 (83.4-90.0) | 17,805 | 87.6 (84.0-90.5) |
| 30-39 | 32,949 | 83.1 (80.2-85.7) | 34,517 | 86.9 (84.1-89.3) | 35,216 | 88.7 (86.2-90.9) | 35,488 | 89.5 (87.0-91.6) | 35,349 | 89.0 (86.4-91.1) |
| 40+ | 2,741 | 80.6 (70.3-87.9) | 2,998 | 87.7 (78.1-93.4) | 2,921 | 85.8 (75.9-92.1) | 2,950 | 86.3 (76.1-92.5) | 2,893 | 84.6 (72.6-91.9) |
| **Education** | | | | | | | | | | |
| <High school | 2,552 | 56.6 (47.1-65.6) | 3,338 | 73.6 (64.9-80.8) | 3,361 | 75.0 (66.0-82.2) | 3,502 | 77.2 (68.6-84.0) | 3,577 | 79.8 (71.2-86.3) |
| High school diploma | 6,529 | 72.0 (65.0-78.8) | 7,186 | 79.1 (72.5-84.4) | 7,645 | 84.3 (79.0-88.4) | 7,499 | 82.7 (76.5-87.5) | 7,754 | 85.4 (79.9-89.6) |
| Some college | 11,677 | 75.6 (69.9-80.5) | 12,919 | 83.6 (78.6-87.6) | 13,274 | 86.1 (81.3-89.8) | 13,180 | 85.7 (81.0-89.3) | 13,251 | 85.7 (81.1-89.4) |
| College graduate | 29,272 | 87.1 (84.0-89.6) | 30,921 | 91.8 (89.3-93.8) | 30,816 | 91.5 (88.9-93.5) | 31,159 | 92.6 (90.1-94.5) | 30,767 | 91.2 (88.4-93.4) |
| **Insurance type** | | | | | | | | | | |
| Private | 34,282 | 87.8 (85.1-90.1) | 36,155 | 92.6 (90.3-94.4) | 36,181 | 92.6 (90.3-94.4) | 36,496 | 93.6 (91.5-95.3) | 36,288 | 92.8 (90.5-94.6) |
| Medicaid | 15,167 | 69.0 (64.4-73.2) | 17,293 | 78.4 (74.3-81.9) | 17,821 | 81.1 (77.3-84.4) | 17,961 | 81.4 (77.6-84.7) | 18,062 | 82.0 (78.1-85.4) |
| Other | 1,083 | 63.0 (44.0-78.7) | 1,366 | 78.8 (61.5-89.6) | 1,486 | 86.5 (74.2-93.4) | 1,371 | 79.8 (62.5-90.4) | 1,453 | 84.6 (66.9-93.7) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 8,351 | 66.7 (60.6-72.4) | 9,587 | 76.1 (70.5-80.9) | 10,261 | 81.9 (77.0-86.0) | 9,941 | 79.4 (74.0-84.0) | 9,823 | 78.2 (72.6-83.0) |
| >100% FPL | 41,638 | 84.0 (81.4-86.4) | 44,413 | 89.6 (87.4-91.5) | 44,562 | 90.0 (87.7-91.8) | 45,160 | 91.2 (89.1-92.9) | 44,980 | 90.8 (88.6-92.5) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 11,113 | 61.1 (56.8-65.3) | 13,588 | 74.5 (70.6-78.0) | 13,989 | 77.0 (73.2-80.4) | 14,322 | 78.5 (74.8-81.8) | 14,501 | 79.4 (75.6-82.7) |
| US-born | 40,333 | 87.3 (84.3-89.7) | 42,315 | 91.5 (89.0-93.5) | 42,684 | 92.3 (90.0-94.1) | 42,652 | 92.4 (90.1-94.3) | 42,426 | 91.8 (89.4-93.7) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 15,727 | 77.7 (73.0-81.8) | 16,798 | 82.8 (78.5-86.5) | 17,560 | 86.5 (82.7-89.5) | 17,258 | 85.2 (81.0-88.6) | 17,337 | 85.3 (81.1-88.7) |
| Married | 35,743 | 80.9 (78.1-83.5) | 39,131 | 88.5 (86.2-90.4) | 39,138 | 88.7 (86.4-90.7) | 39,740 | 90.0 (87.9-91.8) | 39,614 | 89.7 (87.4-91.6) |
| **WIC participation** | | | | | | | | | | |
| No | 38,065 | 85.9 (83.1-88.2) | 40,568 | 91.4 (89.1-93.3) | 40,649 | 91.6 (89.3-93.4) | 41,281 | 93.2 (91.1-94.8) | 40,859 | 92.1 (89.8-93.8) |
| Yes | 13,084 | 66.4 (61.7-70.9) | 15,020 | 76.1 (71.8-80.0) | 15,727 | 80.0 (76.0-83.5) | 15,395 | 78.2 (73.9-81.9) | 15,741 | 79.8 (75.5-83.4) |
| **Disability status** | | | | | | | | | | |
| No | 46,756 | 80.8 (78.3-83.1) | 50,948 | 88.0 (85.9-89.8) | 51,541 | 89.2 (87.2-90.9) | 51,658 | 89.4 (87.4-91.1) | 51,726 | 89.3 (87.3-91.1) |
| Yes | | 71.7 (62.6-79.4) | 4,937 | 75.3 (66.8-82.2) | 5,089 | 77.6 (69.4-84.1) | 5,296 | 80.8 (73.1-86.6) | 5,182 | 79.3 (71.2-85.6) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Loan Money=having someone who could loan money; [4]Help while on Bed Rest=having someone to help while being sick and needed to be in bed; [5]Someone to talk with=having someone to talk with about their problems; [6]Help when tired/frustrated=having someone's help while being tired and feeling frustrated with the new baby; [7]Give ride=having someone to give a ride to see a doctor.

## Table 23. Prevalence of different types of social support after delivery by sociodemographic characteristics, MA PRAMS, 2020

| Characteristic | Loan money[3] | | Bed rest[4] | | Someone to talk with[5] | | Help when tired/ frustrated[6] | | Give ride[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| | n[1] | Percentage (95% CI) | n[1] | Percentage (95% CI) | n[1] | Percentage (95% CI) | n[1] | Percentage (95% CI) | n[1] | Percentage (95% CI) |
| **Total** | 48,139 | 77.7 (74.9-80.3) | 52,648 | 85.1 (82.8-87.2) | 54,183 | 87.4 (85.1-89.3) | 53,947 | 86.9 (84.6-88.8) | 55,057 | 88.6 (86.5-90.4) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 31,255 | 85.8 (81.4-89.4) | 33,237 | 91.5 (87.8-94.2) | 33,761 | 92.7 (89.1-95.2) | 33,737 | 92.7 (89.1-95.1) | 33,756 | 92.7 (89.3-95.1) |
| Black, non-Hispanic | 3,812 | 64.1 (58.1-69.6) | 4,595 | 77.4 (71.7-82.3) | 4,692 | 79.2 (73.6-83.9) | 4,802 | 80.9 (76.1-84.8) | 4,928 | 83.0 (78.5-86.7) |
| Hispanic | 8,807 | 69.8 (64.6-74.6) | 9,244 | 73.2 (68.0-77.9) | 9,903 | 78.0 (73.2-82.2) | 9,480 | 74.6 (69.5-79.1) | 10,482 | 82.0 (77.4-85.9) |
| Asian, non-Hispanic | 3,268 | 57.1 (51.2-62.8) | 4,407 | 77.0 (71.6-81.6) | 4,686 | 81.4 (76.3-85.6) | 4,866 | 84.0 (79.2-87.9) | 4,707 | 81.5 (76.4-85.7) |
| Other, non-Hispanic | 259 | 69.3 (43.7-86.8) | 297 | 79.4 (52.3-93.2) | 274 | 77.7 (49.3-92.6) | 295 | 79.0 (51.5-93.0) | 317 | 84.8 (55.7-96.1) |
| **Age (years)** | | | | | | | | | | |
| <20 | 1,129 | 85.1 (69.7-93.4) | 1,149 | 86.6 (69.2-94.9) | 1,135 | 85.5 (69.6-93.9) | 1,021 | 76.9 (55.1-90.0) | 1,210 | 91.1 (77.2-96.9) |
| 20-29 | 14,275 | 71.5 (65.7-76.6) | 16,333 | 82.0 (77.3-85.8) | 17,232 | 86.4 (82.3-89.6) | 16,817 | 84.2 (79.6-87.9) | 17,219 | 85.9 (81.4-89.5) |
| 30-39 | 29,743 | 81.5 (78.1-84.4) | 31,766 | 87.1 (84.0-89.7) | 32,299 | 88.2 (85.1-90.7) | 32,754 | 89.2 (86.5-91.5) | 33,176 | 90.4 (87.8-92.5) |
| 40+ | 2,992 | 72.6 (60.3-82.3) | 3,400 | 82.5 (71.9-89.7) | 3,517 | 85.7 (75.8-91.9) | 3,355 | 82.0 (71.2-89.4) | 3,452 | 84.4 (73.6-91.3) |
| **Education** | | | | | | | | | | |
| <High school | 2,700 | 63.9 (53.5-73.1) | 3,053 | 70.0 (59.8-78.6) | 3,155 | 73.9 (64.2-81.7) | 2,941 | 67.5 (57.3-76.2) | 3,201 | 73.1 (62.9-81.3) |
| High school diploma | 5,928 | 63.7 (54.3-72.1) | 7,387 | 80.4 (72.8-86.2) | 7,870 | 84.5 (77.6-89.6) | 7,767 | 83.1 (75.9-88.5) | 8,060 | 85.7 (78.6-90.7) |
| Some college | 9,664 | 74.9 (68.0-80.7) | 10,557 | 81.8 (75.4-86.9) | 10,967 | 85.1 (78.8-89.8) | 10,876 | 84.4 (77.9-89.2) | 11,342 | 88.1 (82.5-92.0) |
| College graduate | 29,021 | 84.4 (81.1-87.2) | 30,801 | 89.9 (86.9-92.2) | 31,284 | 90.9 (88.1-93.1) | 31,550 | 91.7 (89.3-93.7) | 31,591 | 91.8 (89.2-93.9) |
| **Insurance type** | | | | | | | | | | |
| Private | 31,706 | 85.4 (82.3-88.1) | 34,407 | 93.0 (90.7-94.7) | 34,697 | 93.5 (91.3-95.2) | 34,280 | 92.3 (89.8-94.2) | 34,497 | 93.0 (90.6-94.8) |
| Medicaid | 14,718 | 67.7 (62.5-72.6) | 16,044 | 73.7 (68.7-78.2) | 17,172 | 78.7 (74.0-82.8) | 17,153 | 78.5 (73.9-82.4) | 18,003 | 81.9 (77.5-85.7) |
| Other | 818 | 64.4 (43.2-81.2) | 923 | 74.9 (53.3-88.7) | 923 | 72.7 (51.4-87.1) | 1,058 | 83.4 (60.9-94.2) | 968 | 78.0 (56.0-90.8) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 6,270 | 55.1 (47.3-62.6) | 7,996 | 70.6 (62.8-77.4) | 8,552 | 74.6 (66.9-81.0) | 8,402 | 73.2 (66.1-79.3) | 8,918 | 77.8 (70.9-83.5) |
| >100% FPL | 39,465 | 84.2 (81.5-86.6) | 41,806 | 89.4 (87.1-91.3) | 42,710 | 91.2 (89.2-92.9) | 42,589 | 90.8 (88.5-92.7) | 42,935 | 91.5 (89.3-93.3) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 12,366 | 58.7 (54.0-63.3) | 15,488 | 73.6 (69.2-77.5) | 16,340 | 77.6 (73.4-81.3) | 16,864 | 79.6 (76.0-82.8) | 17,415 | 82.3 (78.8-85.3) |
| US-born | 35,773 | 87.5 (84.1-90.3) | 37,159 | 91.1 (88.2-93.4) | 37,844 | 92.4 (89.7-94.5) | 37,083 | 90.6 (87.6-93.0) | 37,641 | 91.9 (89.0-94.0) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 14,230 | 76.7 (71.2-81.4) | 15,159 | 81.8 (76.8-85.9) | 15,720 | 84.1 (79.3-88.0) | 15,304 | 82.2 (77.2-86.3) | 16,051 | 85.8 (81.1-89.6) |
| Married | 33,909 | 78.2 (74.8-81.2) | 37,489 | 86.6 (83.8-88.9) | 38,464 | 88.8 (86.2-91.0) | 38,643 | 88.9 (86.4-91.0) | 39,006 | 89.8 (87.4-91.8) |
| **WIC participation** | | | | | | | | | | |
| No | 34,898 | 83.1 (80.0-85.8) | 37,700 | 90.0 (87.6-92.0) | 38,360 | 91.3 (89.0-93.1) | 38,255 | 90.9 (88.4-92.9) | 38,363 | 91.2 (88.8-93.2) |
| Yes | 13,199 | 66.6 (60.9-71.8) | 14,906 | 75.2 (69.7-79.9) | 15,744 | 79.3 (74.1-83.6) | 15,635 | 78.6 (73.8-82.8) | 16,637 | 83.3 (78.7-87.0) |
| **Disability status** | | | | | | | | | | |
| No | 43,405 | 78.6 (75.7-81.3) | 47,785 | 86.8 (84.4-88.8) | 48,874 | 88.5 (86.2-90.4) | 48,725 | 88.2 (85.9-90.1) | 49,639 | 89.8 (87.7-91.6) |
| Yes | 4,676 | 70.2 (59.8-78.9) | 4,806 | 71.8 (61.2-80.4) | 5,251 | 78.4 (68.8-85.7) | 5,165 | 76.4 (66.4-84.2) | 5,327 | 78.8 (68.7-86.3) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Loan Money=having someone who could loan money; [4]Help while on Bed Rest=having someone to help while being sick and needed to be in bed; [5]Someone to talk with=having someone to talk with about their problems; [6]Help when tired/frustrated=having someone's help while being tired and feeling frustrated with the new baby; [7]Give ride=having someone to give a ride to see a doctor

## Table 24. Prevalence of different types of social support after delivery by sociodemographic characteristics, MA PRAMS, 2021

| | Loan money[3] | | Bed rest[4] | | Someone to talk with[5] | | Help when tired/ frustrated[6] | | Give ride[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 52,786 | 81.9 (79.4-84.2) | 56,188 | 87.1 (84.9-89.1) | 57,542 | 89.2 (87.1-91.0) | 57,148 | 88.9 (86.7-90.8) | 58,085 | 90.0 (88-91.7) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 34,729 | 89.9 (86.1-92.8) | 35,570 | 92.1 (88.6-94.6) | 35,954 | 93.1 (89.7-95.5) | 35,671 | 92.4 (88.9-94.8) | 36,111 | 93.5 (90.2-95.7) |
| Black, non-Hispanic | 4,375 | 72.9 (67.3-77.9) | 4,772 | 79.8 (74.6-84.2) | 5,093 | 85.5 (80.7-89.3) | 5,010 | 84.0 (79.2-87.9) | 5,002 | 83.9 (78.9-87.9) |
| Hispanic | 9,124 | 70.0 (64.8-74.6) | 10,156 | 77.7 (72.9-81.9) | 10,822 | 82.6 (78.1-86.3) | 10,579 | 81.9 (77.3-85.8) | 11,318 | 86.0 (81.8-89.3) |
| Asian, non-Hispanic | 2,961 | 59.8 (53.4-65.9) | 3,948 | 79.2 (73.3-84.0) | 3,930 | 78.8 (72.9-83.7) | 4,146 | 83.4 (77.8-87.8) | 3,877 | 78.3 (72.3-83.3) |
| Other, non-Hispanic | 179 | 62.6 (32.7-85.2) | 197 | 68.9 (36.8-89.4) | 197 | 68.9 (36.8-89.4) | 197 | 68.9 (36.8-89.4) | 232 | 81.3 (47.6-95.4) |
| **Age (years)** | | | | | | | | | | |
| <20 | 759 | 74.6 (55.9-87.2) | 943 | 87.6 (70.9-95.3) | 861 | 82.3 (65.2-92.0) | 921 | 90.6 (74.4-97.0) | 974 | 90.5 (74.2-96.9) |
| 20-29 | 13,996 | 76.2 (71.1-80.6) | 15,105 | 82.7 (78.2-86.4) | 15,729 | 85.6 (81.2-89.2) | 15,747 | 86.3 (82.0-89.7) | 16,038 | 87.3 (83.5-90.4) |
| 30-39 | 36,114 | 84.4 (81.3-87.1) | 38,194 | 89.1 (86.3-91.5) | 38,955 | 91.0 (88.4-93.1) | 38,485 | 90.0 (87.2-92.3) | 39,143 | 91.4 (88.8-93.5) |
| 40+ | 1,917 | 84.1 (68.2-92.9) | 1,946 | 85.4 (69.0-93.9) | 1,996 | 87.5 (70.3-95.4) | 1,996 | 87.5 (70.3-95.4) | 1,930 | 84.6 (68.3-93.4) |
| **Education** | | | | | | | | | | |
| <High school | 2,340 | 54.5 (44.5-64.2) | 3,001 | 70.2 (60.0-78.7) | 3,156 | 74.1 (63.9-82.2) | 3,222 | 75.7 (65.5-83.6) | 3,438 | 79.7 (69.6-87.1) |
| High school diploma | 6,318 | 67.9 (59.1-75.6) | 7,153 | 76.6 (68.4-83.1) | 7,639 | 81.7 (73.9-87.6) | 7,711 | 82.8 (75.5-88.3) | 7,767 | 83.4 (76.1-88.9) |
| Some college | 10,228 | 79.9 (73.3-85.3) | 10,846 | 84.8 (78.7-89.5) | 11,296 | 87.9 (82.0-92.1) | 10,945 | 85.9 (79.7-90.5) | 11,447 | 89.1 (83.8-92.8) |
| College graduate | 32,786 | 89.2 (86.4-91.4) | 34,042 | 92.6 (90.0-94.5) | 34,305 | 93.3 (90.8-95.1) | 34,154 | 93.0 (90.3-95.0) | 34,227 | 93.1 (90.6-95.0) |
| **Insurance type** | | | | | | | | | | |
| Private | 34,819 | 89.6 (86.8-91.8) | 36,273 | 93.3 (91.0-95.1) | 36,381 | 93.6 (91.2-95.4) | 36,177 | 93.2 (90.6-95.1) | 36,570 | 94.1 (91.7-95.8) |
| Medicaid | 15,150 | 69.9 (64.8-74.6) | 16,887 | 77.9 (73.0-82.1) | 18,012 | 82.9 (78.4-86.6) | 17,737 | 82.2 (77.6-86.0) | 18,475 | 84.9 (80.8-88.2) |
| Other | 1,341 | 69.6 (48.6-84.7) | 1,386 | 71.4 (50.3-86.0) | 1,456 | 75.0 (53.2-88.8) | 1,491 | 78.0 (55.1-91.1) | 1,368 | 71.6 (50.2-86.3) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 7,336 | 65.5 (58.2-72.1) | 8,234 | 74.0 (66.8-80.0) | 8,869 | 79.3 (73.0-84.5) | 8,866 | 79.6 (73.0-84.9) | 9,375 | 83.4 (78.1-87.7) |
| >100% FPL | 44,303 | 87.8 (85.3-89.9) | 46,439 | 92.0 (89.8-93.7) | 46,903 | 92.9 (90.7-94.6) | 46,616 | 92.6 (90.4-94.3) | 46,757 | 92.7 (90.5-94.4) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 12,524 | 61.6 (56.8-66.2) | 15,580 | 76.1 (71.8-79.9) | 16,415 | 80.4 (76.4-83.8) | 16,176 | 79.6 (75.4-83.2) | 16,228 | 79.4 (75.1-83.1) |
| US-born | 40,262 | 91.3 (88.5-93.5) | 40,608 | 92.3 (89.5-94.4) | 41,127 | 93.3 (90.6-95.3) | 40,972 | 93.2 (90.4-95.2) | 41,858 | 94.9 (92.5-96.6) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 14,867 | 75.6 (70.2-80.4) | 15,988 | 81.3 (76.2-85.5) | 16,317 | 83.0 (77.9-87.1) | 16,625 | 84.8 (79.9-88.7) | 17,317 | 87.8 (83.4-91.2) |
| Married | 37,919 | 84.7 (81.9-87.1) | 40,201 | 89.7 (87.2-91.7) | 41,225 | 92.0 (89.7-93.8) | 40,523 | 90.7 (88.2-92.7) | 40,768 | 910 (88.6-92.9) |
| **WIC participation** | | | | | | | | | | |
| No | 40,159 | 87.3 (84.4-89.7) | 41,797 | 90.7 (88.1-92.8) | 42,314 | 91.9 (89.4-93.9) | 41,933 | 91.2 (88.5-93.3) | 42,618 | 92.5 (90.1-94.3) |
| Yes | 12,557 | 68.5 (63.2-73.4) | 14,290 | 78.2 (73.4-82.3) | 15,127 | 82.6 (78.0-86.3) | 15,145 | 83.2 (78.8-86.9) | 15,366 | 83.8 (79.3-87.5) |
| **Disability status** | | | | | | | | | | |
| No | 47,407 | 83.4 (80.8-85.6) | 50,385 | 88.6 (86.3-90.5) | 51,587 | 90.7 (88.5-92.4) | 51,056 | 90.0 (87.7-91.9) | 51,861 | 91.0 (88.9-92.7) |
| Yes | 5,265 | 72.2 (62.4-80.2) | 5,689 | 77.8 (69.0-84.6) | 5,817 | 79.5 (70.2-86.5) | 5,954 | 81.8 (73.5-87.9) | 6,086 | 83.6 (74.9-89.7) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Loan Money=having someone who could loan money; [4]Help while on Bed Rest=having someone to help while being sick and needed to be in bed; [5]Someone to talk with=having someone to talk with about their problems; [6]Help when tired/frustrated=having someone's help while being tired and feeling frustrated with the new baby; [7]Give ride=having someone to give a ride to see a doctor

## Table 25. Prevalence of emotional support from respondent's partner and financial support from infant's father after delivery by sociodemographic characteristics, MA PRAMS, 2019–2021

| | 2019 | | | | 2020 | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Emotional support[3] | | Financial support[4] | | Emotional support[3] | | Financial support[4] | | Emotional support[3] | | Financial support[4] | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 54,072 | 82.4 (79.9-84.7) | 57,917 | 89.5 (87.6-91.1) | 53,177 | 84.3 (81.8-86.6) | 56,548 | 90.6 (88.4-92.4) | 56,013 | 85.6 (83.1-87.8) | 58,480 | 91.0 (88.9-92.7) |
| **Race/ethnicity** | | | | | | | | | | | | |
| White, non-Hispanic | 33,594 | 85.2 (81.3-88.4) | 36,315 | 93.1 (90.1-95.2) | 32,487 | 88.6 (84.5-91.7) | 34,291 | 94.2 (90.5-96.6) | 34,880 | 89.3 (85.3-92.3) | 35,801 | 93.6 (90.0-95.9) |
| Black, non-Hispanic | 4,743 | 74.5 (69.1-79.3) | 4,873 | 78.4 (73.7-82.6) | 4,349 | 70.5 (64.7-75.7) | 4,951 | 81.8 (77.1-85.6) | 4,352 | 70.0 (64.2-75.2) | 4,629 | 76.6 (71.0-81.4) |
| Hispanic | 9,450 | 74.4 (69.9-78.5) | 10,230 | 82.2 (78.1-85.7) | 9,826 | 75.6 (70.7-79.9) | 10,775 | 83.7 (79.3-87.4) | 10,768 | 81.4 (76.9-85.1) | 11,499 | 87.4 (83.6-90.4) |
| Asian, non-Hispanic | 5,267 | 92.5 (88.8-95.0) | 5,302 | 94.3 (90.7-96.6) | 5,438 | 91.4 (87.4-94.2) | 5,588 | 95.3 (91.9-97.4) | 4,432 | 88.2 (83.1-92.0) | 4,718 | 94.6 (90.4-97.1) |
| Other, non-Hispanic | 567 | 90.5 (74.3-96.9) | 559 | 89.2 (71.6-96.4) | 339 | 90.6 (57.0-98.6) | 305 | 81.6 (50.9-95.0) | 250 | 82.4 (49.7-95.7) | 286 | 100 (.-.) |
| **Age (years)** | | | | | | | | | | | | |
| <20 | 936 | 89.9 (74.1-96.5) | 757 | 72.8 (53.6-86.1) | 1,037 | 78.2 (56.1-90.9) | 902 | 68.0 (46.3-83.9) | 614 | 57.0 (36.9-75.1) | 589 | 56.3 (36.0-74.7) |
| 20-29 | 16,712 | 80.0 (75.8-83.7) | 17,591 | 85.9 (82.2-88.9) | 16,681 | 81.1 (76.3-85.1) | 17,141 | 85.2 (79.9-89.3) | 15,065 | 81.4 (76.2-85.8) | 16,358 | 89.0 (84.7-92.2) |
| 30-39 | 33,661 | 83.7 (80.4-86.6) | 36,782 | 92.3 (90.0-94.2) | 31,908 | 86.2 (82.8-89.1) | 34,696 | 94.2 (91.9-95.9) | 38,515 | 88.8 (85.8-91.2) | 39,409 | 92.7 (90.0-94.7) |
| 40+ | 2,763 | 79.3 (65.8-88.4) | 2,787 | 82.9 (69.2-91.3) | 3,551 | 85.6 (75.9-91.8) | 3,809 | 92.1 (84.0-96.3) | 1,819 | 74.6 (58.5-86.0) | 2,123 | 91.7 (77.5-97.2) |
| **Education** | | | | | | | | | | | | |
| <High school | 3,872 | 81.1 (73.1-87.1) | 3,821 | 83.1 (76.2-88.3) | 3,425 | 73.5 (63.8-81.3) | 3,277 | 74.0 (64.3-81.7) | 3,519 | 78.5 (70.5-84.8) | 3,498 | 79.9 (72.0-86.0) |
| High school diploma | 6,629 | 69.6 (62.1-76.2) | 7,290 | 79.4 (72.8-84.8) | 7,108 | 74.4 (65.8-81.4) | 7,380 | 78.2 (68.7-85.5) | 7,616 | 80.4 (72.8-86.3) | 7,911 | 85.0 (77.4-90.3) |
| Some college | 12,082 | 77.1 (71.7-81.7) | 13,016 | 84.5 (79.8-88.2) | 10,698 | 82.0 (75.7-86.9) | 11,367 | 87.8 (81.6-92.1) | 10,228 | 79.2 (71.8-85.1) | 10,993 | 85.6 (78.9-90.5) |
| College graduate | 30,130 | 89.1 (85.6-91.8) | 32,260 | 95.6 (93.3-97.2) | 30,935 | 89.4 (86.2-92.0) | 33,564 | 97.4 (96.0-98.4) | 33,498 | 90.1 (86.9-92.5) | 34,831 | 95.7 (93.2-97.3) |
| **Insurance type** | | | | | | | | | | | | |
| Private | 35,085 | 89.0 (85.9-91.5) | 37,547 | 96.1 (94.2-97.4) | 33,481 | 89.6 (86.5-92.0) | 36,225 | 97.3 (95.7-98.3) | 35,672 | 91.3 (88.4-93.5) | 36,966 | 95.9 (93.6-97.4) |
| Medicaid | 16,262 | 71.4 (66.9-75.6) | 17,301 | 77.9 (73.6-81.6) | 17,401 | 77.5 (72.8-81.6) | 17,807 | 80.6 (75.6-84.9) | 16,978 | 76.3 (71.2-80.8) | 18,171 | 83.3 (78.8-87.0) |
| Other | 1,521 | 86.4 (69.5-94.7) | 1,718 | 97.7 (90.9-99.4) | 885 | 68.9 (41.5-87.4) | 910 | 71.7 (42.6-89.6) | 1,646 | 84.8 (64.6-94.4) | 1,709 | 88.0 (63.0-96.9) |
| **Household poverty level** | | | | | | | | | | | | |
| ≤100% FPL | 8,867 | 67.9 (61.8-73.5) | 9,205 | 72.1 (66.1-77.4) | 8,605 | 73.1 (65.9-79.3) | 9,097 | 78.2 (71.3-83.8) | 8,211 | 70.9 (64.0-76.9) | 8,795 | 77.9 (71.5-83.2) |
| >100% FPL | 43,291 | 86.4 (83.6-88.8) | 46,624 | 94.1 (92.3-95.5) | 41,781 | 88.0 (85.3-90.2) | 44,474 | 94.6 (92.3-96.2) | 45,503 | 89.3 (86.5-91.6) | 47,247 | 94.2 (91.8-95.9) |
| **Nativity** | | | | | | | | | | | | |
| Non-US-born | 16,005 | 85.4 (82.3-88.0) | 16,367 | 88.8 (86.0-91.1) | 18,085 | 83.6 (79.8-86.7) | 19,238 | 89.9 (86.6-92.4) | 17,347 | 84.5 (81.1-87.3) | 17,997 | 88.6 (85.4-91.2) |
| US-born | 38,067 | 81.3 (78.0-84.2) | 41,550 | 89.8 (87.3-91.9) | 35,092 | 84.8 (81.3-87.7) | 37,310 | 91.0 (87.9-93.4) | 38,665 | 86.2 (82.7-89.0) | 40,483 | 92.1 (89.2-94.2) |
| **Marital status** | | | | | | | | | | | | |
| Unmarried | 14,036 | 67.2 (62.1-71.9) | 15,073 | 74.2 (69.4-78.5) | 14,376 | 75.3 (69.9-80.0) | 14,336 | 76.5 (70.6-81.5) | 14,428 | 71.9 (65.9-77.3) | 15,111 | 77.9 (72.2-82.7) |
| Married | 40,035 | 89.5 (86.8-91.7) | 42,844 | 96.5 (95.1-97.5) | 38,801 | 88.3 (85.3-90.7) | 42,212 | 96.7 (95.0-97.8) | 41,584 | 91.7 (89.4-93.6) | 43,369 | 96.6 (94.9-97.8) |
| **WIC participation** | | | | | | | | | | | | |
| No | 39,223 | 87.3 (84.3-89.8) | 42,029 | 94.6 (92.5-96.1) | 37,734 | 88.5 (85.5-90.9) | 40,298 | 95.6 (93.4-97.0) | 41,539 | 89.3 (86.5-91.6) | 43,143 | 94.4 (92.0-96.1) |
| Yes | 14,658 | 72.2 (67.6-76.4) | 15,532 | 78.0 (73.8-81.8) | 15,382 | 75.8 (70.7-80.3) | 16,141 | 80.2 (75.0-84.6) | 14,403 | 76.8 (71.4-81.4) | 15,231 | 82.6 (77.7-86.6) |
| **Disability status** | | | | | | | | | | | | |
| No | 49,491 | 84.3 (81.7-86.6) | 52,860 | 90.9 (89.0-92.5) | 48,559 | 86.4 (83.8-88.7) | 51,080 | 91.9 (89.6-93.7) | 50,728 | 88.3 (85.8-90.4) | 52,143 | 92.1 (90.0-93.9) |
| Yes | 4,563 | 66.8 (57.6-74.9) | 5,013 | 77.2 (68.6-84.0) | 4,561 | 67.4 (57.1-76.3) | 5,411 | 80.2 (70.7-87.1) | 5,091 | 66.7 (56.7-75.5) | 6,155 | 83.2 (74.6-89.4) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Emotional support=birthing person received encouragement and emotional support from their partner always/often; [4]Financial support=father of baby contributed money, food, clothing, shelter, or health care for new baby always/often

## Table 26. Prevalence of categories of stressors in the 12 months before delivery, by sociodemographic characteristics, MA PRAMS, 2019

| | Any stressors[3] | | Emotional stressors[4] | | Financial stressors[5] | | Partner Stressors[6] | | Traumatic Stressors[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 41,125 | 62.7 (59.6-65.7) | 17,877 | 27.2 (24.5-30.1) | 26,340 | 40.2 (37.2-43.3) | 13,240 | 20.2 (17.8-22.8) | 8,062 | 12.3 (10.4-14.6) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 24,133 | 61.2 (56.4-65.7) | 10,973 | 27.8 (23.7-32.2) | 14,653 | 37.1 (32.6-41.9) | 6,679 | 17.0 (13.6-20.9) | 4,956 | 12.6 (9.8-16.1) |
| Black, non-Hispanic | 4,321 | 68.1 (62.5-73.2) | 1,644 | 25.7 (21.1-31.0) | 3,031 | 48.1 (42.4-53.8) | 2,083 | 32.8 (27.4-38.8) | 747 | 11.9 (8.3-16.8) |
| Hispanic | 9,028 | 71.2 (66.6-75.4) | 3,877 | 30.4 (26.0-35.1) | 6,242 | 49.6 (44.7-54.5) | 3,536 | 27.8 (23.6-32.4) | 1,988 | 15.8 (12.5-19.9) |
| Asian, non-Hispanic | 2,589 | 45.4 (39.9-50.9) | 944 | 16.5 (12.8-21.0) | 1,678 | 29.2 (24.4-34.5) | 582 | 10.2 (7.3-14.1) | Insufficient data[2] | |
| Other, non-Hispanic | 416 | 66.3 (47.4-81.1) | 178 | 28.4 (15.0-47.2) | 323 | 51.5 (33.7-68.8) | 136 | 21.6 (10.1-40.2) | Insufficient data[2] | |
| **Age (years)** | | | | | | | | | | |
| <20 | 678 | 65.1 (45.6-80.7) | 277 | 26.6 (12.1-48.8) | 604 | 60.6 (40.8-77.5) | 406 | 39.0 (21.5-59.9) | 250 | 24.0 (10.0-47.4) |
| 20-29 | 14,622 | 68.5 (63.6-73.0) | 6,700 | 32.1 (27.4-37.2) | 10,714 | 51.4 (46.2-56.5) | 5,210 | 25.0 (21.0-29.5) | 3,983 | 19.2 (15.2-23.9) |
| 30-39 | 22,630 | 55.5 (51.4-59.6) | 10,142 | 25.1 (21.7-28.9) | 13,834 | 34.5 (30.7-38.5) | 6,753 | 16.8 (13.9-20.1) | 3,711 | 9.3 (7.1-12.0) |
| 40+ | 2,164 | 61.1 (48.0-72.9) | 758 | 21.5 (11.9-35.8) | 1,187 | 33.9 (22.2-47.9) | 871 | 24.9 (14.5-39.5) | Insufficient data[2] | |
| **Education** | | | | | | | | | | |
| <High school | 3,037 | 59.6 (50.6-68.0) | 1,445 | 29.5 (21.7-38.9) | 2,287 | 48.1 (38.9-57.4) | 1,087 | 22.4 (15.6-31.0) | 1,052 | 21.8 (14.1-32.0) |
| High school diploma | 6,595 | 67.6 (60.8-73.7) | 2,611 | 27.7 (21.3-35.1) | 4,934 | 52.5 (45.0-59.8) | 2,558 | 26.8 (20.9-33.8) | 1,820 | 19.3 (13.5-26.8) |
| Some college | 10,918 | 68.8 (62.7-74.3) | 4,993 | 31.6 (26.0-37.8) | 7,322 | 46.8 (40.7-53.1) | 4,447 | 28.6 (23.4-34.5) | 2,801 | 18.0 (13.6-23.4) |
| College graduate | 18,185 | 53.2 (48.6-57.8) | 8,494 | 25.1 (21.3-29.3) | 10,821 | 31.9 (27.8-36.4) | 4,533 | 13.4 (10.5-16.9) | 1,889 | 5.6 (3.8-8.1) |
| **Insurance type** | | | | | | | | | | |
| Private | 22,634 | 57.6 (53.2-61.8) | 10,281 | 26.1 (22.4-30.0) | 13,443 | 34.2 (30.2-38.4) | 5,997 | 15.2 (12.3-18.6) | 2,708 | 6.9 (5.0-9.4) |
| Medicaid | 16,517 | 72.3 (68.1-76.2) | 6,739 | 29.4 (25.2-34.0) | 13,148 | 57.9 (53.3-62.4) | 6,388 | 28.2 (24.2-32.5) | 4,826 | 21.3 (17.3-25.9) |
| Other | 893 | 50.0 (33.0-67.0) | 407 | 22.8 (11.9-39.2) | 811 | 45.4 (29.1-62.8) | 293 | 16.4 (7.7-31.8) | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 9,628 | 73.0 (67.6-77.8) | 4,102 | 31.5 (26.0-37.5) | 7,328 | 56.7 (50.7-62.6) | 4,044 | 31.4 (26.0-37.3) | 3,419 | 26.4 (20.9-32.9) |
| >100% FPL | 28,993 | 57.5 (53.7-61.1) | 13,167 | 26.2 (23.1-29.7) | 17,798 | 35.6 (32.1-39.2) | 8,700 | 17.4 (14.7-20.4) | 4,247 | 8.5 (6.7-10.8) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 10,514 | 54.2 (49.9-58.4) | 3,994 | 21.1 (17.9-24.7) | 7,680 | 41.1 (36.9-45.5) | 3,283 | 17.4 (14.6-20.7) | 1,060 | 5.7 (4.0-8.0) |
| US-born | 29,555 | 62.5 (58.5-66.4) | 13,883 | 29.6 (26.1-33.4) | 18,635 | 39.8 (36.0-43.8) | 9,958 | 21.3 (18.3-24.7) | 7,002 | 15 (12.4-18.1) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 15,392 | 72.3 (67.5-76.6) | 6,287 | 29.9 (25.4-34.9) | 11,111 | 53.1 (47.9-58.3) | 6,287 | 29.9 (25.5-34.7) | 4,746 | 22.7 (18.4-27.6) |
| Married | 24,701 | 54.4 (50.5-58.3) | 11,590 | 25.9 (22.6-29.5) | 15,229 | 34.2 (30.6-37.9) | 6,954 | 15.6 (12.9-18.7) | 3,316 | 7.5 (5.6-9.9) |
| **Disability status** | | | | | | | | | | |
| No | 34,594 | 58.6 (55.3-61.8) | 14,761 | 25.2 (22.4-28.2) | 22,666 | 38.8 (35.6-42.1) | 11,071 | 18.9 (16.5-21.6) | 6,603 | 11.3 (9.3-13.7) |
| Yes | 5,242 | 76.7 (67.9-83.7) | 2,892 | 42.5 (33.5-52.0) | 3,573 | 52.9 (43.6-62.1) | 1,958 | 29.3 (22.0-37.8) | 1,433 | 21.5 (14.8-30.0) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Any of 14 stressful life events during the 12 months prior to birth of new infant; [4]Emotional stressors: A close family member was very sick and had to go into the hospital; I was apart from my husband or partner due to military deployment or extended work-related travel; Someone very close to me died; [5]Financial stressors: I moved to a new address; My husband or partner lost his job; I lost my job even though I wanted to go on working; My husband, partner, or I had a cut in work hours or pay; I had problems paying the rent, mortgage, or other bills; [6] Partner stressors: I got separated or divorced from my husband or partner; I argued with my husband or partner more than usual; My husband or partner said he didn't want me to be pregnant ; [7]Traumatic stressors: I was homeless or had to sleep outside in a car, or in a shelter; My husband, partner or I went to jail; . Someone very close to me had a problem with drinking or drugs.

Table 27. Prevalence of categories of stressors in the 12 months before delivery, by sociodemographic characteristics, MA PRAMS, 2020

| | Any stressors[3] | | Emotional stressors[4] | | Financial stressors[5] | | Partner Stressors[6] | | Traumatic Stressors[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 40,626 | 64.2 (60.8-67.4) | 18,337 | 29 (25.8-32.3) | 25,897 | 41.0 (37.6-44.4) | 11,243 | 17.8 (15.3-20.6) | 6,334 | 10.0 (8.0-12.5) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 23,202 | 63.4 (58.0-68.4) | 11,422 | 31.2 (26.3-36.5) | 13,389 | 36.7 (31.6-42.1) | 5,575 | 15.2 (11.6-19.8) | 4,184 | 11.4 (8.3-15.6) |
| Black, non-Hispanic | 4,332 | 70.6 (65.4-75.3) | 1,954 | 31.4 (26.2-37.2) | 2,839 | 46.1 (40.5-51.9) | 1,612 | 26.1 (21.0-31.8) | 625 | 10.1 (7.2-14.0) |
| Hispanic | 8,753 | 65.9 (60.7-70.7) | 3,413 | 25.7 (21.4-30.5) | 6,560 | 49.3 (44.0-54.6) | 3,168 | 24.1 (19.7-29.0) | 1,260 | 9.5 (6.8-13.1) |
| Asian, non-Hispanic | 3,295 | 55.0 (49.2-60.6) | 912 | 15.3 (11.6-19.8) | 2,394 | 40.1 (34.6-45.8) | 793 | 13.3 (9.8-17.7) | 131 | 2.2 (1.0-4.9) |
| Other, non-Hispanic | 281 | 68.9 (43.5-86.5) | 205 | 52.4 (29.0-74.8) | 154 | 37.9 (18.6-61.8) | Insufficient data[2] | | Insufficient data[2] | |
| **Age (years)** | | | | | | | | | | |
| <20 | 1,004 | 69.3 (48.8-84.3) | 336 | 24.5 (10.2-48.1) | 827 | 59.6 (38.3-77.7) | 376 | 27.1 (12.9-48.2) | 376 | 28 (11.9-53.0) |
| 20-29 | 14,011 | 66.9 (61.0-72.3) | 6,237 | 30.1 (24.6-36.2) | 10,634 | 51.3 (45.2-57.4) | 4,672 | 22.6 (17.8-28.2) | 2,751 | 13.3 (9.3-18.6) |
| 30-39 | 21,448 | 57.1 (52.6-61.5) | 10,426 | 28.1 (24.2-32.5) | 13,473 | 36.5 (32.2-40.9) | 5,498 | 14.9 (11.9-18.4) | 2,842 | 7.7 (5.5-10.7) |
| 40+ | 2,050 | 49.2 (36.8-61.7) | 1,339 | 32.4 (21.7-45.3) | 963 | 23.2 (15.1-33.9) | 698 | 16.7 (9.3-28.4) | 365 | 8.8 (3.5-20.5) |
| **Education** | | | | | | | | | | |
| <High school | 3,313 | 66.8 (57.4-75.1) | 1,161 | 24.8 (16.9-34.8) | 2,775 | 58.3 (48.2-67.8) | 1,286 | 27.5 (18.6-38.7) | 740 | 15.6 (8.3-27.2) |
| High school diploma | 6,547 | 66.0 (57.4-73.6) | 3,518 | 36.0 (27.4-45.5) | 4,862 | 49.7 (40.9-58.6) | 2,522 | 25.9 (18.4-35.0) | 2,122 | 21.8 (14.7-31.1) |
| Some college | 8,296 | 63.0 (55.4-70.1) | 3,892 | 29.8 (23.2-37.3) | 5,975 | 46.2 (38.5-54.0) | 3,147 | 24.1 (18.1-31.4) | 1,634 | 12.5 (7.9-19.2) |
| College graduate | 19,340 | 55.6 (50.9-60.2) | 9,226 | 26.7 (22.7-31.2) | 11,638 | 33.8 (29.5-38.3) | 4,154 | 12.0 (9.4-15.2) | 1,622 | 4.7 (3.1-7.2) |
| **Insurance type** | | | | | | | | | | |
| Private | 21,778 | 58.5 (53.9-63.0) | 10,490 | 28.2 (24.1-32.6) | 14,279 | 38.3 (34.0-42.9) | 4,012 | 10.8 (8.3-13.8) | 2,023 | 5.4 (3.7-8.0) |
| Medicaid | 16,442 | 72.1 (67.2-76.5) | 6,978 | 30.7 (25.6-36.2) | 13,724 | 60.5 (55.1-65.6) | 6,510 | 28.7 (23.8-34.1) | 4,084 | 18.0 (13.6-23.3) |
| Other | 965 | 76.1 (55.2-89.1) | 453 | 35.3 (15.4-61.9) | 606 | 47.8 (26.9-69.5) | 321 | 25.0 (8.1-55.8) | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 8,712 | 73.7 (67.4-79.1) | 3,499 | 29.9 (23.3-37.5) | 7,091 | 60.3 (52.8-67.3) | 2,969 | 25.4 (19.6-32.2) | 2,040 | 17.4 (12.1-24.5) |
| >100% FPL | 27,294 | 57.4 (53.3-61.4) | 13,505 | 28.6 (25.0-32.5) | 16,763 | 35.5 (31.8-39.5) | 7,238 | 15.3 (12.6-18.5) | 3,683 | 7.8 (5.7-10.6) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 13,149 | 59.3 (54.9-63.6) | 5,181 | 24.0 (20.1-28.2) | 9,807 | 45.3 (40.7-49.9) | 3,470 | 16.1 (13.1-19.5) | 1,193 | 5.5 (3.7-8.3) |
| US-born | 25,364 | 60.4 (55.8-64.9) | 13,156 | 31.6 (27.3-36.1) | 16,090 | 38.7 (34.3-43.3) | 7,773 | 18.7 (15.3-22.6) | 5,141 | 12.4 (9.5-15.9) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 14,378 | 72.8 (67.0-77.9) | 6,653 | 34.1 (28.3-40.4) | 10,863 | 55.9 (49.5-62.0) | 5,890 | 30.3 (24.9-36.4) | 3,977 | 20.5 (15.4-26.7) |
| Married | 24,135 | 54.4 (50.3-58.5) | 11,684 | 26.7 (23.1-30.6) | 15,034 | 34.3 (30.5-38.4) | 5,353 | 12.2 (9.7-15.2) | 2,357 | 5.4 (3.8-7.6) |
| **Disability status** | | | | | | | | | | |
| No | 32,600 | 58.0 (54.3-61.5) | 14,853 | 26.6 (23.4-30.0) | 21,657 | 38.8 (35.3-42.4) | 8,020 | 14.4 (12.0-17.1) | 4,880 | 8.7 (6.7-11.3) |
| Yes | 5,535 | 81.6 (71.9-88.4) | 3,370 | 50.0 (39.2-60.8) | 3,907 | 58.1 (46.9-68.5) | 3,107 | 46.5 (35.8-57.6) | 1,290 | 19.3 (11.5-30.4) |

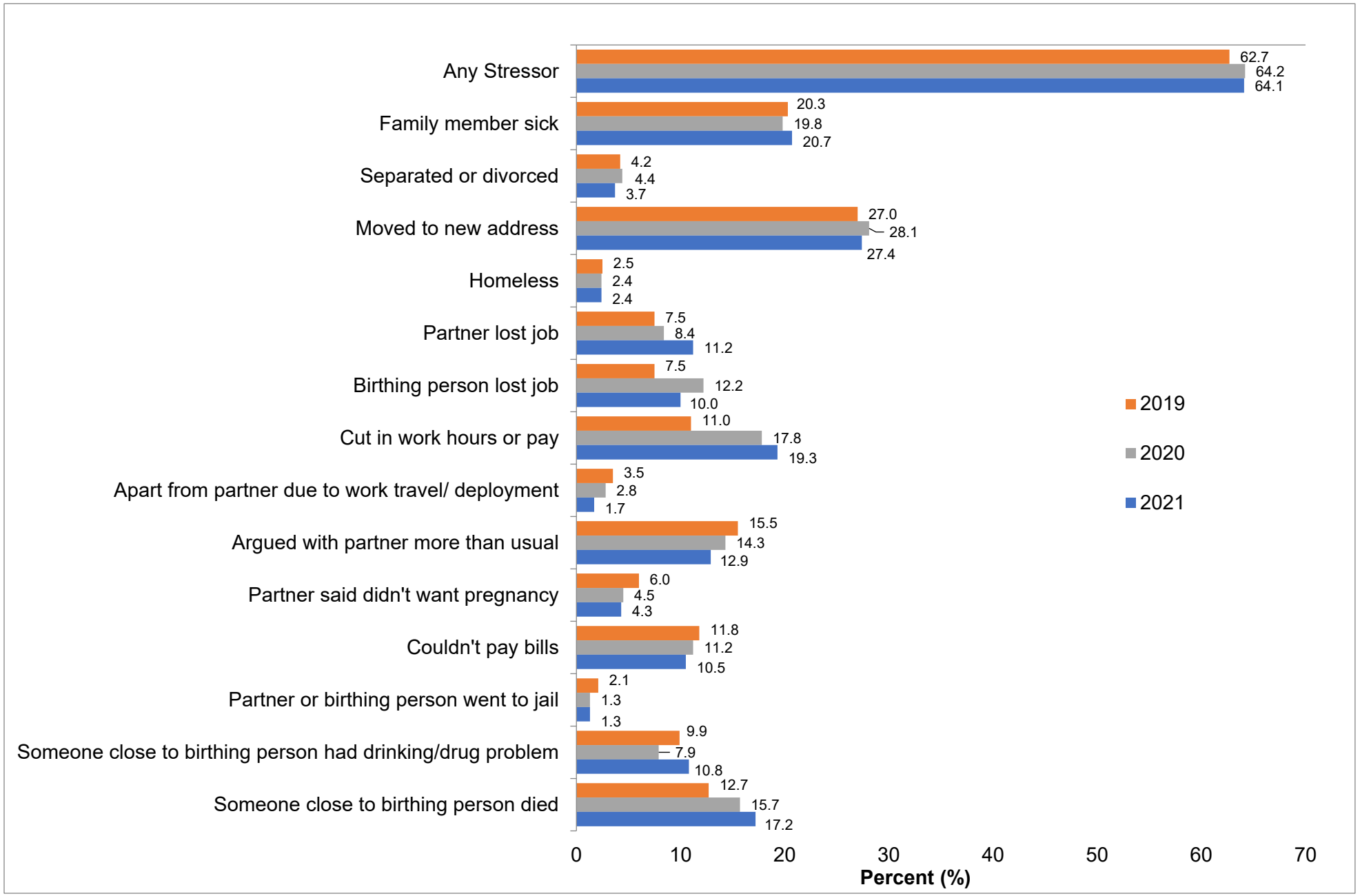
[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Any of 14 stressful life events during the 12 months prior to birth of new infant; [4]Emotional stressors: A close family member was very sick and had to go into the hospital; I was apart from my husband or partner due to military deployment or extended work-related travel; Someone very close to me died; [5]Financial stressors: I moved to a new address; My husband or partner lost his job; I lost my job even though I wanted to go on working; My husband, partner, or I had a cut in work hours or pay; I had problems paying the rent, mortgage, or other bills; [6] Partner stressors: I got separated or divorced from my husband or partner; I argued with my husband or partner more than usual; My husband or partner said he didn't want me to be pregnant ; [7]Traumatic stressors: I was homeless or had to sleep outside in a car, or in a shelter; My husband, partner or I went to jail; . Someone very close to me had a problem with drinking or drugs.

## Table 28. Prevalence of categories of stressors in the 12 months before delivery, by sociodemographic characteristics, MA PRAMS, 2021

| | Any stressors[3] | | Emotional stressors[4] | | Financial stressors[5] | | Partner Stressors[6] | | Traumatic Stressors[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 42,341 | 64.1 (60.7-67.4) | 19,410 | 29.4 (26.4-32.7) | 31,022 | 47.1 (43.6-50.5) | 10,961 | 16.6 (14.2-19.4) | 8,599 | 13 (10.7-15.8) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 24,507 | 62.4 (57.1-67.3) | 11,694 | 29.8 (25.2-34.8) | 17,286 | 44.0 (38.8-49.3) | 5,785 | 14.7 (11.2-19.1) | 5,656 | 14.4 (10.9-18.8) |
| Black, non-Hispanic | 4,673 | 74.0 (68.1-79.2) | 2,427 | 38.6 (32.9-44.6) | 3,603 | 57.2 (51.1-63.0) | 1,659 | 26.1 (21.2-31.7) | 875 | 13.7 (10.1-18.5) |
| Hispanic | 9,586 | 70.7 (65.7-75.3) | 4,120 | 30.5 (25.8-35.5) | 7,476 | 55.6 (50.3-60.8) | 2,599 | 19.3 (15.5-23.7) | 1,653 | 12.3 (9.2-16.3) |
| Asian, non-Hispanic | 2,762 | 55.0 (48.6-61.2) | 879 | 17.5 (13.2-22.9) | 2,099 | 41.8 (35.7-48.2) | 537 | 10.7 (7.3-15.5) | 179 | 3.6 (1.8-7.1) |
| Other, non-Hispanic | 179 | 58.9 (31.1-82.0) | Insufficient data[2] | | 161 | 53.0 (26.7-77.7) | Insufficient data[2] | | 0 | 0 (.-.) |
| **Age (years)** | | | | | | | | | | |
| <20 | 861 | 82.3 (65.2-92.0) | 429 | 39.9 (22.0-60.9) | 730 | 69.8 (51.0-83.6) | 350 | 32.5 (15.8-55.4) | 267 | 25.5 (9.9-51.5) |
| 20-29 | 12,982 | 69.1 (63.2-74.5) | 5,990 | 31.9 (26.3-38.1) | 10,495 | 56.0 (49.7-62.0) | 3,659 | 19.5 (14.9-25.1) | 3,739 | 20 (14.9-26.2) |
| 30-39 | 26,762 | 61.1 (56.8-65.4) | 12,033 | 27.5 (23.8-31.6) | 18,741 | 42.9 (38.6-47.3) | 6,198 | 14.2 (11.4-17.5) | 4,350 | 9.9 (7.4-13.2) |
| 40+ | 1,736 | 71.2 (52.5-84.7) | 958 | 39.3 (24.7-56.1) | 1,056 | 43.3 (28.0-60.1) | 753 | 30.9 (17.6-48.4) | 244 | 10 (3.8-23.7) |
| **Education** | | | | | | | | | | |
| <High school | 3,010 | 66.4 (56.6-74.9) | 1,079 | 24.3 (16.9-33.7) | 2,494 | 55.4 (45.6-64.9) | 780 | 17.4 (11.9-24.9) | 543 | 12.2 (6.7-21.3) |
| High school diploma | 6,766 | 69.8 (60.9-77.4) | 3,141 | 32.3 (24.5-41.2) | 5,634 | 58.5 (49.4-67.1) | 1,576 | 16.3 (11.0-23.4) | 1,922 | 19.9 (13.2-29) |
| Some college | 9,587 | 73.7 (65.8-80.3) | 4,464 | 34.4 (27.2-42.3) | 7,424 | 57.2 (49.1-65.0) | 3,295 | 25.3 (18.8-33.1) | 3,126 | 24 (17.2-32.4) |
| College graduate | 22,522 | 60.1 (55.5-64.6) | 10,625 | 28.4 (24.4-32.8) | 15,086 | 40.3 (35.8-44.9) | 5,208 | 13.9 (10.9-17.6) | 2,972 | 7.9 (5.7-11.0) |
| **Insurance type** | | | | | | | | | | |
| Private | 23,920 | 60.8 (56.2-65.3) | 11,402 | 29.0 (25.0-33.4) | 15,671 | 39.9 (35.5-44.5) | 4,859 | 12.4 (9.6-15.8) | 3,194 | 8.1 (5.8-11.3) |
| Medicaid | 15,855 | 70.0 (64.7-74.9) | 6,802 | 30.0 (25.2-35.3) | 13,039 | 57.8 (52.2-63.2) | 5,042 | 22.3 (17.9-27.4) | 4,516 | 20.0 (15.4-25.5) |
| Other | 1,340 | 69.0 (46.6-85.0) | 586 | 30.7 (15.6-51.6) | 1,239 | 63.8 (42.6-80.8) | 609 | 31.3 (15.7-52.8) | 376 | 19.3 (7.7-40.9) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 8,342 | 71.7 (64.4-78.1) | 3,688 | 31.7 (25.3-39.0) | 6,968 | 59.9 (52.4-67.0) | 2,687 | 23.2 (17.5-30.0) | 2,700 | 23.4 (16.9-31.3) |
| >100% FPL | 32,279 | 63.0 (59.0-66.9) | 14,940 | 29.2 (25.7-33.0) | 22,699 | 44.4 (40.4-48.4) | 7,827 | 15.3 (12.6-18.5) | 5,480 | 10.7 (8.3-13.8) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 12,837 | 61.4 (56.5-66.0) | 5,022 | 24.1 (20.3-28.3) | 10,281 | 49.3 (44.5-54.0) | 3,229 | 15.4 (12.5-18.9) | 1,482 | 7.1 (4.9-10.1) |
| US-born | 29,505 | 65.4 (60.9-69.6) | 14,388 | 31.9 (27.8-36.2) | 20,741 | 46.0 (41.5-50.6) | 7,732 | 17.1 (13.9-20.9) | 7,118 | 15.8 (12.6-19.6) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 14,608 | 70.8 (64.6-76.2) | 6,122 | 29.7 (24.2-35.9) | 11,630 | 56.3 (49.8-62.6) | 5,442 | 26.3 (21.0-32.5) | 5,221 | 25.3 (19.7-31.8) |
| Married | 27,733 | 61.1 (57.0-65.1) | 13,288 | 29.3 (25.7-33.1) | 19,392 | 42.8 (38.9-46.9) | 5,519 | 12.2 (9.8-15.0) | 3,378 | 7.5 (5.5-10.0) |
| **Disability status** | | | | | | | | | | |
| No | 35,222 | 61.0 (57.3-64.7) | 15,909 | 27.6 (24.4-31.1) | 25,212 | 43.8 (40.1-47.5) | 8,043 | 13.9 (11.5-16.7) | 6,100 | 10.6 (8.3-13.4) |
| Yes | 6,631 | 86.5 (78.7-91.8) | 3,254 | 42.5 (33.2-52.3) | 5,548 | 72.4 (63.4-79.9) | 2,631 | 34.5 (25.6-44.7) | 2,344 | 30.6 (21.7-41.2) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Any of 14 stressful life events during the 12 months prior to birth of new infant; [4]Emotional stressors: A close family member was very sick and had to go into the hospital; I was apart from my husband or partner due to military deployment or extended work-related travel; Someone very close to me died; [5]Financial stressors: I moved to a new address; My husband or partner lost his job; I lost my job even though I wanted to go on working; My husband, partner, or I had a cut in work hours or pay; I had problems paying the rent, mortgage, or other bills; [6] Partner stressors: I got separated or divorced from my husband or partner; I argued with my husband or partner more than usual; My husband or partner said he didn't want me to be pregnant ; [7]Traumatic stressors: I was homeless or had to sleep outside in a car, or in a shelter; My husband, partner or I went to jail; . Someone very close to me had a problem with drinking or drugs.

Figure 15. Prevalence of individual stressful life events during the 12 months before delivery, MA PRAMS, 2019-2021



## Table 29. Prevalence of stressors in the 12 months before delivery, by race/ethnicity, MA PRAMS, 2019

| | Overall | | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | | Other non-Hispanic | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Stressor** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total (Any stressor)** | 41,125 | 62.7 (59.6-65.7) | 24,133 | 61.2 (56.4-65.7) | 4,321 | 68.1 (62.5-73.2) | 9,028 | 71.2 (66.6-75.4) | 2,589 | 45.4 (39.9-50.9) | 416 | 66.3 (47.4-81.1) |
| A close family member was sick /in hospital | 13,381 | 20.3 (17.8-23.0) | 9,100 | 23 (19.2-27.2) | 887 | 13.9 (10.2-18.5) | 2,483 | 19.4 (15.8-23.7) | 626 | 10.9 (7.9-14.8) | 136 | 21.6 (10.1-40.2) |
| Got separated or divorced from partner | 2,782 | 4.2 (3.3-5.5) | 698 | 1.8 (0.9-3.5) | 511 | 8.0 (4.8-12.9) | 1,305 | 10.2 (7.6-13.7) | Insufficient data[2] | | Insufficient data[2] | |
| Moved to a new address | 17,760 | 27.0 (24.3-29.8) | 10,065 | 25.4 (21.5-29.7) | 1,800 | 28.4 (23.2-34.3) | 4,005 | 31.5 (27.1-36.3) | 1,397 | 24.3 (19.9-29.4) | 230 | 36.6 (21.4-55.1) |
| Homeless or had to sleep outside, in car, in shelter | 41,125 | 62.7 (59.6-65.7) | 324 | 0.8 (0.3-2.3) | 333 | 5.2 (3.2-8.3) | 738 | 5.8 (3.8-8.8) | Insufficient data[2] | | 0 | 0 (.-.) |
| Partner lost job | 4,935 | 7.5 (6.0-9.3) | 2,791 | 7.1 (5.0-9.9) | 422 | 6.6 (4.4-9.9) | 1,352 | 10.8 (8.0-14.2) | 129 | 2.2 (1.1-4.6) | Insufficient data[2] | |
| Birthing person lost job | 4,952 | 7.5 (6.1-9.2) | 1,970 | 5.0 (3.2-7.6) | 742 | 11.7 (8.6-15.8) | 1,810 | 14.3 (11.1-18.1) | 188 | 3.3 (1.8-6.0) | Insufficient data[2] | |
| Partner or birthing person had reduced work/pay | 7,185 | 11.0 (9.2-13.0) | 3,671 | 9.3 (6.9-12.4) | 929 | 14.7 (11.2-19) | 2,041 | 16.2 (12.9-20.2) | 241 | 4.2 (2.6-6.9) | Insufficient data[2] | |
| Apart from partner due to military deployment or extended work-related travel | 2,332 | 3.5 (2.5-4.9) | 1,334 | 3.4 (2.0-5.7) | 235 | 3.7 (2.2-6.1) | 437 | 3.4 (2-5.7) | 215 | 3.7 (2.2-6.4) | 0 | 0 (.-.) |
| Argued with partner more than usual | 10,197 | 15.5 (13.4-17.9) | 5,494 | 13.9 (10.9-17.6) | 1,464 | 23 (18.4-28.3) | 2,406 | 18.9 (15.4-23.1) | 497 | 8.7 (6.1-12.4) | 110 | 17.6 (7.6-35.7) |
| Partner didn't want birthing person to be pregnant | 3,929 | 6.0 (4.6-7.7) | 1,967 | 5.0 (3.2-7.7) | 688 | 10.8 (7.9-14.6) | 1,078 | 8.5 (6.0-11.8) | Insufficient data[2] | | Insufficient data[2] | |
| Problems paying rent, mortgage, other bills | 7,733 | 11.8 (9.9-13.9) | 4,005 | 10.2 (7.6-13.5) | 1,094 | 17.1 (13.4-21.5) | 2,136 | 16.8 (13.4-20.9) | 153 | 2.7 (1.3-5.4) | Insufficient data[2] | |
| Partner or birthing person went to jail | 1,354 | 2.1 (1.4-3.2) | 535 | 1.4 (0.6-2.9) | 130 | 2.1 (0.9-4.8) | 441 | 3.5 (2.0-6.0) | 0 | 0 (.-.) | Insufficient data[2] | |
| Someone close to birthing person had problem with drinking/drugs | 6,518 | 9.9 (8.1-12.1) | 4,749 | 12.0 (9.3-15.5) | 468 | 7.3 (4.4-12.0) | 1,083 | 8.5 (6.1-11.8) | Insufficient data[2] | | 0 | 0 (.-.) |
| Someone very close to birthing person died | 8,363 | 12.7 (10.8-14.9) | 4,788 | 12.2 (9.4-15.6) | 887 | 13.9 (10.7-17.8) | 2,056 | 16.1 (12.9-20.1) | 300 | 5.2 (3.2-8.3) | 110 | 17.6 (7.6-35.7) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 30. Prevalence of stressors in the 12 months before delivery, by race/ethnicity, MA PRAMS, 2020

| | Overall | | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | | Other non-Hispanic | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Stressor** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total (Any stressor)** | 40,626 | 64.2 (60.8-67.4) | 23,202 | 63.4 (58.0-68.4) | 4,332 | 70.6 (65.4-75.3) | 8,753 | 65.9 (60.7-70.7) | 3,295 | 55.0 (49.2-60.6) | 281 | 68.9 (43.5-86.5) |
| A close family member was sick /in hospital | 12,522 | 19.8 (17.0-22.8) | 8,660 | 23.7 (19.3-28.7) | 1,069 | 17.0 (12.8-22.4) | 1,892 | 14.3 (11.1-18.3) | 510 | 8.6 (5.9-12.3) | Insufficient data[2] | |
| Got separated or divorced from partner | 2,797 | 4.4 (3.2-6.1) | 1,101 | 3.0 (1.5-5.9) | 501 | 8.1 (4.7-13.4) | 1,101 | 8.3 (5.7-11.8) | Insufficient data[2] | | Insufficient data[2] | |
| Moved to a new address | 17,812 | 28.1 (25.1-31.2) | 9,532 | 26 (21.6-31) | 1,811 | 28.9 (24.2-34.2) | 3,824 | 28.7 (24.2-33.7) | 1,968 | 32.8 (27.7-38.3) | 116 | 29.8 (12.7-55.3) |
| Homeless or had to sleep outside, in car, in shelter | 1,513 | 2.4 (1.5-3.8) | 699 | 1.9 (0.8-4.7) | 291 | 4.6 (2.7-7.9) | 489 | 3.7 (2.0-6.5) | Insufficient data[2] | | 0 | 0 (.-.) |
| Partner lost job | 5,297 | 8.4 (6.6-10.5) | 2,520 | 6.9 (4.5-10.5) | 682 | 11.0 (8.0-14.8) | 1,649 | 12.4 (9.2-16.4) | 274 | 4.6 (2.6-8.0) | 73 | 17.9 (5.7-44.0) |
| Birthing person lost job | 7,731 | 12.2 (10.1-14.7) | 3,639 | 9.9 (6.9-14.1) | 944 | 15.2 (11.7-19.4) | 2,480 | 18.7 (14.9-23.2) | 551 | 9.3 (6.3-13.4) | Insufficient data[2] | |
| Partner or birthing person had reduced work/pay | 11,197 | 17.8 (15.2-20.6) | 6,132 | 16.8 (13-21.4) | 1,477 | 24.1 (19.3-29.8) | 2,543 | 19.5 (15.6-24.1) | 856 | 14.4 (10.7-19.1) | Insufficient data[2] | |
| Apart from partner due to military deployment or extended work-related travel | 1,783 | 2.8 (1.8-4.3) | 1,022 | 2.8 (1.4-5.6) | 309 | 5.0 (3.1-8) | 233 | 1.8 (0.8-3.9) | 184 | 3.1 (1.7-5.6) | Insufficient data[2] | |
| Argued with partner more than usual | 9,023 | 14.3 (12.0-16.9) | 4,531 | 12.4 (9.1-16.6) | 1,178 | 18.9 (14.9-23.7) | 2,588 | 19.6 (15.6-24.3) | 674 | 11.3 (8.1-15.5) | Insufficient data[2] | |
| Partner didn't want birthing person to be pregnant | 2,847 | 4.5 (3.3-6.1) | 1,345 | 3.7 (2.0-6.6) | 514 | 8.3 (5.7-11.8) | 797 | 6.0 (3.9-9.3) | 148 | 2.5 (1.1-5.5) | Insufficient data[2] | |
| Problems paying rent, mortgage, other bills | 7,051 | 11.2 (9.3-13.5) | 2,840 | 7.8 (5.2-11.6) | 1,159 | 18.7 (14.9-23.3) | 2,618 | 19.7 (15.8-24.3) | 412 | 6.9 (4.3-11) | Insufficient data[2] | |
| Partner or birthing person went to jail | 799 | 1.3 (0.7-2.4) | Insufficient data[2] | | 114 | 1.8 (0.8-4.1) | 253 | 1.9 (0.9-3.9) | Insufficient data[2] | | 0 | 0 (.-.) |
| Someone close to birthing person had a problem with drinking or drugs | 5,005 | 7.9 (6.1-10.2) | 3,586 | 9.8 (6.9-13.7) | 430 | 6.9 (4.6-10.2) | 758 | 5.7 (3.7-8.6) | 97 | 1.6 (0.7-3.8) | Insufficient data[2] | |
| Someone very close to birthing person died | 9,948 | 15.7 (13.2-18.5) | 5,758 | 15.7 (12-20.4) | 1,213 | 19.4 (14.9-24.9) | 2,152 | 16.1 (12.6-20.4) | 381 | 6.4 (4.1-9.9) | 115 | 29.3 (12.5-54.7) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 31. Prevalence of stressors in the 12 months before delivery, by race/ethnicity, MA PRAMS, 2021

| | Overall | | White non-Hispanic | | Black non-Hispanic | | Hispanic | | Asian non-Hispanic | | Other non-Hispanic | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Stressor** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total (Any stressor)** | 42,341 | 64.1 (60.7-67.4) | 24,507 | 62.4 (57.1-67.3) | 4,673 | 74 (68.1-79.2) | 9,586 | 70.7 (65.7-75.3) | 2,762 | 55 (48.6-61.2) | 179 | 58.9 (31.1-82.0) |
| | | | | | | | | | | | | |
| A close family member was sick /in hospital | 13,367 | 20.7 (18-23.7) | 9,291 | 23.6 (19.5-28.4) | 1,265 | 19.8 (15.6-24.8) | 2,094 | 15.5 (12.0-19.6) | 682 | 13.6 (9.8-18.5) | Insufficient data[2] | |
| Got separated or divorced from partner | 2,412 | 3.7 (2.7-5.2) | 845 | 2.1 (1.0-4.8) | 557 | 8.8 (5.9-12.9) | 940 | 7.0 (4.8-10.1) | Insufficient data[2] | | Insufficient data[2] | |
| Moved to a new address | 17,674 | 27.4 (24.4-30.6) | 10,186 | 25.9 (21.5-30.9) | 1,976 | 31.1 (25.9-36.7) | 4,076 | 30.3 (25.6-35.5) | 1,364 | 27.2 (21.9-33.1) | Insufficient data[2] | |
| Homeless or had to sleep outside, in car, in shelter | 1,517 | 2.4 (1.5-3.7) | Insufficient data[2] | | 280 | 4.4 (2.4-7.8) | 636 | 4.7 (2.8-7.8) | Insufficient data[2] | | 0 | 0 (.-.) |
| Partner lost job | 7,186 | 11.2 (9.1-13.7) | 4,236 | 10.8 (7.8-14.7) | 644 | 10.1 (7.1-14.2) | 1,949 | 14.6 (11.2-18.8) | 358 | 7.1 (4.3-11.5) | 0 | 0 (.-.) |
| Birthing person lost job | 6,419 | 10.0 (8.2-12.1) | 2,373 | 6.0 (3.8-9.4) | 981 | 15.3 (11.5-20.1) | 2,671 | 19.8 (15.8-24.5) | 323 | 6.4 (3.9-10.3) | Insufficient data[2] | |
| Partner or birthing person had reduced work/pay | 12,380 | 19.3 (16.6-22.3) | 1,557 | 24.5 (19.9-29.9) | 1,557 | 24.5 (19.9-29.9) | 2,917 | 21.9 (17.8-26.5) | 573 | 11.5 (7.9-16.3) | Insufficient data[2] | |
| Apart from partner due to military deployment or extended work-related travel | 1,127 | 1.7 (1.1-2.7) | 437 | 1.1 (0.4-2.7) | 241 | 3.8 (2.2-6.5) | 450 | 3.3 (1.9-5.8) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| Argued with partner more than usual | 8,341 | 12.9 (10.7-15.5) | 4,783 | 12.2 (9.0-16.3) | 1,171 | 18.4 (14.2-23.5) | 1,868 | 13.8 (10.6-17.9) | Insufficient data[2] | | Insufficient data[2] | |
| Partner didn't want birthing person to be pregnant | 2,738 | 4.3 (3.1-5.9) | 1,432 | 3.7 (2.1-6.4) | 492 | 7.7 (5.1-11.5) | 689 | 5.1 (3.2-8.2) | Insufficient data[2] | | Insufficient data[2] | |
| Problems paying rent, mortgage, other bills | 6,779 | 10.5 (8.6-12.7) | 2,627 | 6.7 (4.3-10.2) | 1,064 | 16.7 (12.8-21.5) | 2,750 | 20.4 (16.5-25) | 249 | 5.0 (2.5-9.6) | Insufficient data[2] | |
| Partner or birthing person went to jail | 851 | 1.3 (0.7-2.4) | Insufficient data[2] | | 223 | 3.5 (1.7-6.9) | 8 | 289 | Insufficient data[2] | | 0 | 0 (.-.) |
| Someone close to birthing person had a problem with drinking or drugs | 6,972 | 10.8 (8.6-13.5) | 5,233 | 13.3 (9.9-17.6) | 525 | 8.2 (5.5-12.0) | 1,052 | 7.8 (5.4-11.2) | 161 | 3.2 (1.5-6.7) | 0 | 0 (.-.) |
| Someone very close to birthing person died | 11,096 | 17.2 (14.8-19.9) | 6,398 | 16.3 (12.8-20.5) | 1,648 | 25.9 (21-31.5) | 2,585 | 19.2 (15.3-23.7) | 448 | 8.9 (5.8-13.4) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 32. Prevalence of smoking prior to pregnancy, during pregnancy, and postpartum by sociodemographic characteristics, MA PRAMS, 2019

| | Smoking prior to pregnancy[3] | | Smoking in pregnancy[4] | | Smoking postpartum[5] | | Smoking relapse[6] | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 7,656 | 11.6 (9.6-14.0) | 2,942 | 4.5 (3.3-6.0) | 4,273 | 6.5 (5.0-8.3) | 1,401 | 29.5 (19.1-42.7) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 5,816 | 14.7 (11.6-18.5) | 2,245 | 5.7 (3.9-8.2) | 3,159 | 8.0 (5.7-11.0) | 921 | 25.7 (13.8-42.7) |
| Black, non-Hispanic | 565 | 8.8 (6.2-12.3) | 181 | 2.8 (1.5-5.2) | 305 | 4.7 (2.9-7.5) | 124 | 31.2 (15.6-52.8) |
| Hispanic | 754 | 5.9 (4.0-8.6) | 360 | 2.8 (1.6-4.9) | 486 | 3.8 (2.3-6.2) | 152 | 38.5 (16.9-65.8) |
| Asian, non-Hispanic | 271 | 4.7 (2.7-8.1) | Insufficient data[2] | | 161 | 2.8 (1.4-5.7) | Insufficient data[2] | |
| Other, non-Hispanic | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Age (years)** | | | | | | | | |
| <20 | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| 20-29 | 3,073 | 14.6 (11.1-19.1) | 1,581 | 7.5 (5.0-11.1) | 2,148 | 10.2 (7.3-14.2) | 723 | 48.1 (28.0-68.8) |
| 30-39 | 4,096 | 10.1 (7.7-13.2) | 1,217 | 3.0 (1.9-4.8) | 1,980 | 4.9 (3.3-7.2) | 677 | 23.5 (11.8-41.4) |
| 40+ | 434 | 12.4 (5.2-26.7) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | | | |
| <High school | 530 | 11.0 (6.2-18.9) | 371 | 7.7 (3.7-15.4) | 446 | 9.3 (4.8-17.0) | Insufficient data[2] | |
| High school diploma | 2,023 | 21.0 (15.0-28.7) | 1,034 | 10.8 (6.4-17.6) | 1,257 | 13.1 (8.5-19.7) | 342 | 34.5 (15.7-59.9) |
| Some college | 2,861 | 18.1 (13.4-24.0) | 1,127 | 7.1 (4.4-11.2) | 1,880 | 11.9 (8.1-17.2) | 643 | 36.4 (18.3-59.4) |
| College graduate | 2,068 | 6.1 (4.1-9.0) | 373 | 1.1 (0.4-2.8) | 578 | 1.7 (0.8-3.7) | Insufficient data[2] | |
| **Insurance type** | | | | | | | | |
| Private | 2,737 | 6.9 (4.9-9.7) | 549 | 1.4 (0.6-3.1) | 1,048 | 2.7 (1.5-4.7) | 642 | 29.3 (14.6-50.3) |
| Medicaid | 4,737 | 20.6 (16.6-25.2) | 2,292 | 9.9 (7.2-13.6) | 3,124 | 13.6 (10.3-17.7) | 759 | 30.8 (17.3-48.7) |
| Other | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 2,899 | 22.3 (17.0-28.7) | 1,580 | 12.1 (8.1-17.7) | 2,195 | 16.9 (12.2-22.9) | 504 | 37.9 (19.3-60.8) |
| >100% FPL | 4,570 | 9.1 (7.1-11.7) | 1,200 | 2.4 (1.5-3.8) | 1,916 | 3.8 (2.6-5.6) | 897 | 26.5 (14.6-43.0) |
| **Nativity** | | | | | | | | |
| Non-US-born | 828 | 4.4 (2.6-7.3) | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| US-born | 6,829 | 14.6 (11.9-17.7) | 2,838 | 6.0 (4.4-8.2) | 3,940 | 8.4 (6.4-10.9) | 1,146 | 28.5 (17.6-42.8) |
| **Marital status** | | | | | | | | |
| Unmarried | 4,744 | 22.6 (18.2-27.6) | 2,348 | 11.2 (8.1-15.2) | 3,038 | 14.5 (10.9-18.9) | 735 | 30.5 (17.0-48.5) |
| Married | 2,912 | 6.5 (4.6-9.0) | 595 | 1.3 (0.6-2.7) | 1,235 | 2.7 (1.6-4.6) | 665 | 28.5 (14.4-48.7) |
| **WIC participation** | | | | | | | | |
| No | 3,830 | 8.5 (6.4-11.2) | 938 | 2.1 (1.2-3.5) | 1,714 | 3.8 (2.5-5.8) | 801 | 27.7 (14.9-45.5) |
| Yes | 3,732 | 18.3 (14.3-23.1) | 2,005 | 9.8 (6.9-13.8) | 2,559 | 12.5 (9.2-16.9) | 600 | 34.1 (18.0-55.1) |
| **Disability status** | | | | | | | | |
| No | 5,953 | 10.2 (8.2-12.6) | 2,299 | 3.9 (2.8-5.5) | 3,281 | 5.6 (4.2-7.5) | 1,014 | 27.5 (16.3-42.5) |
| Yes | 1,678 | 24.7 (17-34.3) | 618 | 9.1 (4.9-16.2) | 968 | 14.2 (8.5-22.7) | 387 | 36.5 (15.5-64.4) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Smoking during the 3 months prior to pregnancy; [4]Smoking in the last 3 months of pregnancy; [5]Smoking in postpartum period; [6]Smoking relapse among those who had smoked three months prior to pregnancy but quit in pregnancy.

## Table 33. Prevalence of smoking prior to pregnancy, during pregnancy, and postpartum by sociodemographic characteristics, MA PRAMS, 2020

| | Smoking prior to pregnancy[3] | | Smoking in pregnancy[4] | | Smoking postpartum[5] | | Smoking relapse[6] | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 5,824 | 9.1 (7.1-11.7) | 2,472 | 3.9 (2.5-6.0) | 4,070 | 6.4 (4.6-8.8) | 1,425 | 42.3 (27.1-59.2) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 4,492 | 12.2 (8.9-16.6) | 2,132 | 5.8 (3.5-9.4) | 3,252 | 8.9 (5.9-13.0) | 921 | 39.0 (20.0-62.1) |
| Black, non-Hispanic | 262 | 4.1 (2.5-6.7) | 104 | 1.6 (0.8-3.3) | 161 | 2.5 (1.4-4.7) | Insufficient data[2] | |
| Hispanic | 851 | 6.4 (4.1-9.7) | 203 | 1.5 (0.6-3.7) | 642 | 4.8 (2.8-8.1) | 432 | 66.7 (42.3-84.6) |
| Asian, non-Hispanic | 220 | 3.6 (1.9-6.9) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| Other, non-Hispanic | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Age (years)** | | | | | | | | |
| <20 | 400 | 28.8 (12.6-53.2) | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| 20-29 | 2,505 | 12.1 (8.1-17.7) | 1,264 | 6.1 (3.2-11.1) | 2,075 | 10.0 (6.2-15.6) | 606 | 48.8 (23.4-74.9) |
| 30-39 | 2,272 | 6.1 (4.0-9.1) | 769 | 2.1 (0.9-4.5) | 1,294 | 3.5 (1.9-6.3) | 557 | 36.7 (16.6-62.8) |
| 40+ | 647 | 15.5 (7.9-28.2) | Insufficient data[2] | | 503 | 12.1 (5.2-25.5) | Insufficient data[2] | |
| **Education** | | | | | | | | |
| <High school | 601 | 12.4 (5.7-25.2) | 366 | 7.6 (2.4-21.8) | 427 | 8.8 (3.2-22.4) | Insufficient data[2] | |
| High school diploma | 1,819 | 18.6 (11.9-27.8) | 747 | 7.6 (3.7-15.0) | 1,282 | 13.1 (7.6-21.6) | 584 | 53.7 (24.2-80.8) |
| Some college | 2,035 | 15.5 (10.1-23.1) | 1,259 | 9.6 (5.1-17.3) | 1,793 | 13.7 (8.3-21.7) | 329 | 42.3 (17.8-71.3) |
| College graduate | 1,335 | 3.9 (2.3-6.5) | Insufficient data[2] | | 568 | 1.6 (0.7-4.0) | 452 | 36.6 (14.3-66.6) |
| **Insurance type** | | | | | | | | |
| Private | 2,034 | 5.4 (3.6-8.2) | Insufficient data[2] | | 1,199 | 3.2 (1.7-5.9) | 631 | 37.2 (17.4-62.5) |
| Medicaid | 3,065 | 13.3 (9.5-18.5) | 1,935 | 8.4 (5.2-13.3) | 2,581 | 11.2 (7.6-16.4) | 703 | 61.4 (36.4-81.5) |
| Other | Insufficient data[2] | | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 1,586 | 13.4 (8.5-20.4) | 738 | 6.2 (3.1-12.3) | 967 | 8.2 (4.6-14.2) | 255 | 30.0 (11.5-58.7) |
| >100% FPL | 3,888 | 8.2 (5.9-11.2) | 1,490 | 3.1 (1.8-5.6) | 2,601 | 5.5 (3.6-8.3) | 1,079 | 44.7 (26.2-64.9) |
| **Nativity** | | | | | | | | |
| Non-US-born | 740 | 3.4 (1.5-7.2) | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| US-born | 5,084 | 12.2 (9.3-15.8) | 2,259 | 5.4 (3.5-8.4) | 3,582 | 8.6 (6.1-12.0) | 1,136 | 40.0 (24.2-58.2) |
| **Marital status** | | | | | | | | |
| Unmarried | 3,615 | 18.4 (13.6-24.5) | 1,725 | 8.8 (5.4-14.1) | 2,563 | 13.1 (8.9-18.8) | 880 | 46.2 (26.4-67.3) |
| Married | 2,210 | 5.0 (3.2-7.7) | 747 | 1.7 (0.7-4.0) | 1,507 | 3.4 (1.9-6.1) | 545 | 37.3 (16.2-64.6) |
| **WIC participation** | | | | | | | | |
| No | 2,814 | 6.6 (4.5-9.6) | 885 | 2.1 (1.0-4.4) | 1,607 | 3.8 (2.2-6.4) | 691 | 35.8 (17.3-59.9) |
| Yes | 3,010 | 14.5 (10.4-19.9) | 1,587 | 7.6 (4.5-12.6) | 2,463 | 11.8 (7.9-17.4) | 734 | 51.0 (29.0-72.7) |
| **Disability status** | | | | | | | | |
| No | 4,310 | 7.7 (5.7-10.2) | 1,628 | 2.9 (1.7-4.9) | 2,991 | 5.3 (3.6-7.8) | 1,212 | 44.9 (27.7-63.4) |
| Yes | 1,469 | 21.7 (13.0-33.9) | 829 | 12.2 (5.7-24.4) | 1,034 | 15.2 (8-27.1) | 183 | 28.6 (7.4-66.7) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Smoking during the 3 months prior to pregnancy; [4]Smoking in the last 3 months of pregnancy; [5]Smoking in postpartum period; [6]Smoking relapse among those who had smoked three months prior to pregnancy but quit in pregnancy.

## Table 34. Prevalence of smoking prior to pregnancy, during pregnancy, and postpartum by sociodemographic characteristics, MA PRAMS, 2021

| | Smoking prior to pregnancy[3] | | Smoking in pregnancy[4] | | Smoking postpartum[5] | | Smoking relapse[6] | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 5,458 | 8.2 (6.3-10.8) | 2,444 | 3.7 (2.4-5.6) | 3,108 | 4.7 (3.2-6.8) | 815 | 27.0 (13.6-46.7) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 4,166 | 10.6 (7.5-14.8) | 1,850 | 4.7 (2.7-8.0) | 2,451 | 6.2 (3.9-9.8) | 601 | 26.0 (10.4-51.6) |
| Black, non-Hispanic | 311 | 4.8 (2.7-8.5) | 187 | 2.9 (1.3-6.3) | 231 | 3.6 (1.8-7.0) | Insufficient data[2] | |
| Hispanic | 820 | 6.0 (4.0-9.0) | 353 | 2.6 (1.3-5.0) | 390 | 2.9 (1.5-5.3) | Insufficient data[2] | |
| Asian, non-Hispanic | 107 | 2.1 (0.9-5.1) | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| Other, non-Hispanic | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Age (years)** | | | | | | | | |
| <20 | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| 20-29 | 1,703 | 9.0 (5.6-14.3) | 963 | 5.1 (2.6-10.0) | 1,163 | 6.2 (3.3-11.3) | Insufficient data[2] | |
| 30-39 | 3,561 | 8.1 (5.8-11.3) | 1,450 | 3.3 (1.9-5.7) | 1,945 | 4.4 (2.8-7.1) | 569 | 26.9 (11.5-51.1) |
| 40+ | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | . (.-.) |
| **Education** | | | | | | | | |
| <High school | 226 | 4.9 (1.8-12.7) | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| High school diploma | 1,488 | 15.3 (9.4-23.9) | 644 | 6.6 (3.2-13.1) | 817 | 8.4 (4.3-15.8) | Insufficient data[2] | |
| Some college | 2,266 | 17.4 (11.5-25.4) | 1,319 | 10.1 (5.5-17.9) | 1,568 | 12.0 (7.0-20.0) | 277 | 29.3 (9.3-62.5) |
| College graduate | 1,443 | 3.9 (2.2-6.8) | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Insurance type** | | | | | | | | |
| Private | 1,256 | 3.2 (1.8-5.7) | Insufficient data[2] | | 578 | 1.5 (0.6-3.6) | Insufficient data[2] | |
| Medicaid | 3,821 | 16.8 (12.4-22.4) | 2,127 | 9.4 (6.0-14.3) | 2,370 | 10.4 (6.9-15.5) | 375 | 22.1 (8.6-46.2) |
| Other | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 2,114 | 18.1 (12.1-26.3) | 1,324 | 11.3 (6.5-19.1) | 1,405 | 12 (7.1-19.7) | 140 | 17.7 (6.1-41.6) |
| >100% FPL | 2,949 | 5.8 (4.0-8.3) | 1,084 | 2.1 (1.1-4.0) | 1,470 | 2.9 (1.6-5.1) | 477 | 25.6 (9.7-52.4) |
| **Nativity** | | | | | | | | |
| Non-US-born | 485 | 2.3 (1.2-4.5) | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| US-born | 4,973 | 11 (8.3-14.6) | 2,360 | 5.2 (3.4-8.0) | 3,019 | 6.7 (4.5-9.8) | 761 | 29.1 (14.0-51.0) |
| **Marital status** | | | | | | | | |
| Unmarried | 4,112 | 19.9 (14.7-26.5) | 1,987 | 9.6 (6.0-15.1) | 2,490 | 12.1 (7.9-18) | 636 | 29.9 (13.0-54.9) |
| Married | 1,346 | 3.0 (1.8-4.8) | 457 | 1.0 (0.4-2.3) | 619 | 1.4 (0.7-2.7) | Insufficient data[2] | |
| **WIC participation** | | | | | | | | |
| No | 2,521 | 5.4 (3.6-8.0) | 921 | 2.0 (1.0-3.9) | 1,170 | 2.5 (1.3-4.6) | Insufficient data[2] | |
| Yes | 2,937 | 15.2 (10.7-21.3) | 1,523 | 7.9 (4.6-13.1) | 1,939 | 10.1 (6.3-15.7) | 475 | 33.6 (13.3-62.4) |
| **Disability status** | | | | | | | | |
| No | 3,789 | 6.5 (4.7-9.1) | 1,336 | 2.3 (1.3-4.1) | 1,740 | 3.0 (1.8-5.0) | 487 | 19.9 (7.8-42.1) |
| Yes | 1,597 | 21.3 (13.5-31.8) | 1,072 | 14.3 (7.8-24.7) | 1,333 | 17.8 (10.4-28.7) | 328 | 62.5 (29.5-86.9) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Smoking during the 3 months prior to pregnancy; [4]Smoking in the last 3 months of pregnancy; [5]Smoking in postpartum period; [6]Smoking relapse among those who had smoked three months prior to pregnancy but quit in pregnancy.

## Table 35. Prevalence of smoking prior to pregnancy by sociodemographic characteristics, MA PRAMS, 2019-2021

| | Smoking prior to pregnancy[3] | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 7,656 | 11.6 (9.6-14.0) | 5,824 | 9.1 (7.1-11.7) | 5,458 | 8.2 (6.3-10.8) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 5,816 | 14.7 (11.6-18.5) | 4,492 | 12.2 (8.9-16.6) | 4,166 | 10.6 (7.5-14.8) |
| Black, non-Hispanic | 565 | 8.8 (6.2-12.3) | 262 | 4.1 (2.5-6.7) | 311 | 4.8 (2.7-8.5) |
| Hispanic | 754 | 5.9 (4.0-8.6) | 851 | 6.4 (4.1-9.7) | 820 | 6.0 (4.0-9.0) |
| Asian, non-Hispanic | 271 | 4.7 (2.7-8.1) | 220 | 3.6 (1.9-6.9) | 107 | 2.1 (0.9-5.1) |
| Other, non-Hispanic | Insufficient data[2] | | 0 | 0 (.-.) | Insufficient data[2] | |
| **Age (years)** | | | | | | |
| <20 | Insufficient data[2] | | 400 | 28.8 (12.6-53.2) | Insufficient data[2] | |
| 20-29 | 3,073 | 14.6 (11.1-19.1) | 2,505 | 12.1 (8.1-17.7) | 1,703 | 9 (5.6-14.3) |
| 30-39 | 4,096 | 10.1 (7.7-13.2) | 2,272 | 6.1 (4.0-9.1) | 3,561 | 8.1 (5.8-11.3) |
| 40+ | 434 | 12.4 (5.2-26.7) | 647 | 15.5 (7.9-28.2) | 0 | 0 (.-.) |
| **Education** | | | | | | |
| <High school | 530 | 11.0 (6.2-18.9) | 601 | 12.4 (5.7-25.2) | 226 | 4.9 (1.8-12.7) |
| High school diploma | 2,023 | 21.0 (15.0-28.7) | 1,819 | 18.6 (11.9-27.8) | 1,488 | 15.3 (9.4-23.9) |
| Some college | 2,861 | 18.1 (13.4-24.0) | 2,035 | 15.5 (10.1-23.1) | 2,266 | 17.4 (11.5-25.4) |
| College graduate | 2,068 | 6.1 (4.1-9.0) | 1,335 | 3.9 (2.3-6.5) | 1,443 | 3.9 (2.2-6.8) |
| **Insurance type** | | | | | | |
| Private | 2,737 | 6.9 (4.9-9.7) | 2,034 | 5.4 (3.6-8.2) | 1,256 | 3.2 (1.8-5.7) |
| Medicaid | 4,737 | 20.6 (16.6-25.2) | 3,065 | 13.3 (9.5-18.5) | 3,821 | 16.8 (12.4-22.4) |
| Other | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 2,899 | 22.3 (17.0-28.7) | 1,586 | 13.4 (8.5-20.4) | 2,114 | 18.1 (12.1-26.3) |
| >100% FPL | 4,570 | 9.1 (7.1-11.7) | 3,888 | 8.2 (5.9-11.2) | 2,949 | 5.8 (4.0-8.3) |
| **Nativity** | | | | | | |
| Non-US-born | 828 | 4.4 (2.6-7.3) | 740 | 3.4 (1.5-7.2) | 485 | 2.3 (1.2-4.5) |
| US-born | 6,829 | 14.6 (11.9-17.7) | 5,084 | 12.2 (9.3-15.8) | 4,973 | 11 (8.3-14.6) |
| **Marital status** | | | | | | |
| Unmarried | 4,744 | 22.6 (18.2-27.6) | 3,615 | 18.4 (13.6-24.5) | 4,112 | 19.9 (14.7-26.5) |
| Married | 2,912 | 6.5 (4.6-9.0) | 2,210 | 5.0 (3.2-7.7) | 1,346 | 3.0 (1.8-4.8) |
| **WIC participation** | 0 | (-) | 0 | (-) | | |
| No | 3,830 | 8.5 (6.4-11.2) | 2,814 | 6.6 (4.5-9.6) | 2,521 | 5.4 (3.6-8.0) |
| Yes | 3,732 | 18.3 (14.3-23.1) | 3,010 | 14.5 (10.4-19.9) | 2,937 | 15.2 (10.7-21.3) |
| **Disability status** | | | | | | |
| No | 5,953 | 10.2 (8.2-12.6) | 4,310 | 7.7 (5.7-10.2) | 3,789 | 6.5 (4.7-9.1) |
| Yes | 1,678 | 24.7 (17.0-34.3) | 1,469 | 21.7 (13.0-33.9) | 1,597 | 21.3 (13.5-31.8) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Smoking during the 3 months prior to pregnancy.

## Table 36. Prevalence of smoking during pregnancy by sociodemographic characteristics, MA PRAMS, 2019-2021

| | Smoking in the last 3 months of pregnancy | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 2,942 | 4.5 (3.3-6.0) | 2,472 | 3.9 (2.5-6.0) | 2,444 | 3.7 (2.4-5.6) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 2,245 | 5.7 (3.9-8.2) | 2,132 | 5.8 (3.5-9.4) | 1,850 | 4.7 (2.7-8.0) |
| Black, non-Hispanic | 181 | 2.8 (1.5-5.2) | 104 | 1.6 (0.8-3.3) | 187 | 2.9 (1.3-6.3) |
| Hispanic | 360 | 2.8 (1.6-4.9) | 203 | 1.5 (0.6-3.7) | 353 | 2.6 (1.3-5.0) |
| Asian, non-Hispanic | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| Other, non-Hispanic | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Age (years)** | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | |
| 20-29 | 1,581 | 7.5 (5.0-11.1) | 1,264 | 6.1 (3.2-11.1) | 963 | 5.1 (2.6-10.0) |
| 30-39 | 1,217 | 3.0 (1.9-4.8) | 769 | 2.1 (0.9-4.5) | 1,450 | 3.3 (1.9-5.7) |
| 40+ | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | |
| <High school | 371 | 7.7 (3.7-15.4) | 366 | 7.6 (2.4-21.8) | Insufficient data[2] | |
| High school diploma | 1,034 | 10.8 (6.4-17.6) | 747 | 7.6 (3.7-15.0) | 644 | 6.6 (3.2-13.1) |
| Some college | 1,127 | 7.1 (4.4-11.2) | 1,259 | 9.6 (5.1-17.3) | 1,319 | 10.1 (5.5-17.9) |
| College graduate | 373 | 1.1 (0.4-2.8) | Insufficient data[2] | | Insufficient data[2] | |
| **Insurance type** | | | | | | |
| Private | 549 | 1.4 (0.6-3.1) | Insufficient data[2] | | Insufficient data[2] | |
| Medicaid | 2,292 | 9.9 (7.2-13.6) | 1,935 | 8.4 (5.2-13.3) | 2,127 | 9.4 (6.0-14.3) |
| Other | 0 | 0 (.-.) | 0 | 0 (.-.) | Insufficient data[2] | |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 1,580 | 12.1 (8.1-17.7) | 738 | 6.2 (3.1-12.3) | 1,324 | 11.3 (6.5-19.1) |
| >100% FPL | 1,200 | 2.4 (1.5-3.8) | 1,490 | 3.1 (1.8-5.6) | 1,084 | 2.1 (1.1-4.0) |
| **Nativity** | | | | | | |
| Non-US-born | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| US-born | 2,838 | 6.0 (4.4-8.2) | 2,259 | 5.4 (3.5-8.4) | 2,360 | 5.2 (3.4-8.0) |
| **Marital status** | | | | | | |
| Unmarried | 2,348 | 11.2 (8.1-15.2) | 1,725 | 8.8 (5.4-14.1) | 1,987 | 9.6 (6.0-15.1) |
| Married | 595 | 1.3 (0.6-2.7) | 747 | 1.7 (0.7-4.0) | 457 | 1.0 (0.4-2.3) |
| **WIC participation** | | | | | | |
| No | 938 | 2.1 (1.2-3.5) | 885 | 2.1 (1.0-4.4) | 921 | 2.0 (1.0-3.9) |
| Yes | 2,005 | 9.8 (6.9-13.8) | 1,587 | 7.6 (4.5-12.6) | 1,523 | 7.9 (4.6-13.1) |
| **Disability status** | | | | | | |
| No | 2,299 | 3.9 (2.8-5.5) | 1,628 | 2.9 (1.7-4.9) | 1,336 | 2.3 (1.3-4.1) |
| Yes | 618 | 9.1 (4.9-16.2) | 829 | 12.2 (5.7-24.4) | 1,072 | 14.3 (7.8-24.7) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5);

## Table 37. Prevalence of smoking postpartum by sociodemographic characteristics, MA PRAMS, 2019-2021

| | Smoking in the postpartum period | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 4,273 | 6.5 (5.0-8.3) | 4,070 | 6.4 (4.6-8.8) | 3,108 | 4.7 (3.2-6.8) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 3,159 | 8.0 (5.7-11.0) | 3,252 | 8.9 (5.9-13.0) | 2,451 | 6.2 (3.9-9.8) |
| Black, non-Hispanic | 305 | 4.7 (2.9-7.5) | 161 | 2.5 (1.4-4.7) | 231 | 3.6 (1.8-7.0) |
| Hispanic | 486 | 3.8 (2.3-6.2) | 642 | 4.8 (2.8-8.1) | 390 | 2.9 (1.5-5.3) |
| Asian, non-Hispanic | 161 | 2.8 (1.4-5.7) | Insufficient data[2] | | Insufficient data[2] | |
| Other, non-Hispanic | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Age (years)** | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | 2,148 | 10.2 (7.3-14.2) | 2,075 | 10.0 (6.2-15.6) | 1,163 | 6.2 (3.3-11.3) |
| 30-39 | 1,980 | 4.9 (3.3-7.2) | 1,294 | 3.5 (1.9-6.3) | 1,945 | 4.4 (2.8-7.1) |
| 40+ | Insufficient data[2] | | 503 | 12.1 (5.2-25.5) | 0 | 0 (.-.) |
| **Education** | | | | | | |
| <High school | 446 | 9.3 (4.8-17.0) | 427 | 8.8 (3.2-22.4) | Insufficient data[2] | |
| High school diploma | 1,257 | 13.1 (8.5-19.7) | 1,282 | 13.1 (7.6-21.6) | 817 | 8.4 (4.3-15.8) |
| Some college | 1,880 | 11.9 (8.1-17.2) | 1,793 | 13.7 (8.3-21.7) | 1,568 | 12.0 (7.0-20.0) |
| College graduate | 578 | 1.7 (0.8-3.7) | 568 | 1.6 (0.7-4.0) | Insufficient data[2] | |
| **Insurance type** | | | | | | |
| Private | 1,048 | 2.7 (1.5-4.7) | 1,199 | 3.2 (1.7-5.9) | 578 | 1.5 (0.6-3.6) |
| Medicaid | 3,124 | 13.6 (10.3-17.7) | 2,581 | 11.2 (7.6-16.4) | 2,370 | 10.4 (6.9-15.5) |
| Other | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 2,195 | 16.9 (12.2-22.9) | 967 | 8.2 (4.6-14.2) | 1,405 | 12 (7.1-19.7) |
| >100% FPL | 1,916 | 3.8 (2.6-5.6) | 2,601 | 5.5 (3.6-8.3) | 1,470 | 2.9 (1.6-5.1) |
| **Nativity** | | | | | | |
| Non-US-born | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| US-born | 3,940 | 8.4 (6.4-10.9) | 3,582 | 8.6 (6.1-12.0) | 3,019 | 6.7 (4.5-9.8) |
| **Marital status** | | | | | | |
| Unmarried | 3,038 | 14.5 (10.9-18.9) | 2,563 | 13.1 (8.9-18.8) | 2,490 | 12.1 (7.9-18) |
| Married | 1,235 | 2.7 (1.6-4.6) | 1,507 | 3.4 (1.9-6.1) | 619 | 1.4 (0.7-2.7) |
| **WIC participation** | 0 | (-) | 0 | (-) | | |
| No | 1,714 | 3.8 (2.5-5.8) | 1,607 | 3.8 (2.2-6.4) | 1,170 | 2.5 (1.3-4.6) |
| Yes | 2,559 | 12.5 (9.2-16.9) | 2,463 | 11.8 (7.9-17.4) | 1,939 | 10.1 (6.3-15.7) |
| **Disability status** | | | | | | |
| No | 3,281 | 5.6 (4.2-7.5) | 2,991 | 5.3 (3.6-7.8) | 1,740 | 3.0 (1.8-5.0) |
| Yes | 968 | 14.2 (8.5-22.7) | 1,034 | 15.2 (8.0-27.1) | 1,333 | 17.8 (10.4-28.7) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5);

## Table 38. Prevalence of smoking relapse by sociodemographic characteristics, MA PRAMS, 2019-2021

| | Smoking relapse[3] | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 1,401 | 29.5 (19.1-42.7) | 1,425 | 42.3 (27.1-59.2) | 815 | 27.0 (13.6-46.7) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 921 | 25.7 (13.8-42.7) | 921 | 39.0 (20.0-62.1) | 601 | 26.0 (10.4-51.6) |
| Black, non-Hispanic | 124 | 31.2 (15.6-52.8) | Insufficient data[2] | | Insufficient data[2] | |
| Hispanic | 152 | 38.5 (16.9-65.8) | 432 | 66.7 (42.3-84.6) | Insufficient data[2] | |
| Asian, non-Hispanic | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| Other, non-Hispanic | Insufficient data[2] | | 0 | . (.-.) | 0 | 0 (.-.) |
| **Age (years)** | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | 723 | 48.1 (28.0-68.8) | 606 | 48.8 (23.4-74.9) | Insufficient data[2] | |
| 30-39 | 677 | 23.5 (11.8-41.4) | 557 | 36.7 (16.6-62.8) | 569 | 26.9 (11.5-51.1) |
| 40+ | 0 | 0 (.-.) | Insufficient data[2] | | 0 | . (.-.) |
| **Education** | | | | | | |
| <High school | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| High school diploma | 342 | 34.5 (15.7-59.9) | 584 | 53.7 (24.2-80.8) | Insufficient data[2] | |
| Some college | 643 | 36.4 (18.3-59.4) | 329 | 42.3 (17.8-71.3) | 277 | 29.3 (9.3-62.5) |
| College graduate | Insufficient data[2] | | 452 | 36.6 (14.3-66.6) | Insufficient data[2] | |
| **Insurance type** | | | | | | |
| Private | 642 | 29.3 (14.6-50.3) | 631 | 37.2 (17.4-62.5) | Insufficient data[2] | |
| Medicaid | 759 | 30.8 (17.3-48.7) | 703 | 61.4 (36.4-81.5) | 375 | 22.1 (8.6-46.2) |
| Other | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Household poverty level** | 0 | (-) | 0 | (-) | | |
| ≤100% FPL | 504 | 37.9 (19.3-60.8) | 255 | 30.0 (11.5-58.7) | 140 | 17.7 (6.1-41.6) |
| >100% FPL | 897 | 26.5 (14.6-43.0) | 1,079 | 44.7 (26.2-64.9) | 477 | 25.6 (9.7-52.4) |
| **Nativity** | 0 | (-) | 0 | (-) | | |
| Non-US-born | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| US-born | 1,146 | 28.5 (17.6-42.8) | 1,136 | 40.0 (24.2-58.2) | 761 | 29.1 (14-51) |
| **Marital status** | 0 | (-) | 0 | (-) | | |
| Unmarried | 735 | 30.5 (17.0-48.5) | 880 | 46.2 (26.4-67.3) | 636 | 29.9 (13.0-54.9) |
| Married | 665 | 28.5 (14.4-48.7) | 545 | 37.3 (16.2-64.6) | Insufficient data[2] | |
| **WIC participation** | 0 | (-) | 0 | (-) | | |
| No | 801 | 27.7 (14.9-45.5) | 691 | 35.8 (17.3-59.9) | Insufficient data[2] | |
| Yes | 600 | 34.1 (18.0-55.1) | 734 | 51.0 (29.0-72.7) | 475 | 33.6 (13.3-62.4) |
| **Disability status** | 0 | (-) | 0 | (-) | | |
| No | 1,014 | 27.5 (16.3-42.5) | 1,212 | 44.9 (27.7-63.4) | 487 | 19.9 (7.8-42.1) |
| Yes | 387 | 36.5 (15.5-64.4) | 183 | 28.6 (7.4-66.7) | 328 | 62.5 (29.5-86.9) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Smoking relapse among those who had smoked three months prior to pregnancy but quit in pregnancy

## Table 39. Prevalence of e-smoking prior to pregnancy and during pregnancy, by sociodemographic characteristics, MA PRAMS, 2019

| | E-cigarettes/vaping last 2 years[3] | | E-cigarettes/vaping 3 months prior pregnancy[4] | | E-cigarettes/vaping last 3 months of pregnancy[5] | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 3,177 | 4.8 (3.6-6.5) | 1,704 | 2.6 (1.7-3.9) | 566 | 0.9 (0.4-1.8) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 2,345 | 6.0 (4.1-8.6) | 1,211 | 3.1 (1.8-5.3) | 424 | 1.1 (0.4-2.8) |
| Black, non-Hispanic | 203 | 3.2 (1.8-5.6) | 174 | 2.7 (1.4-5.0) | Insufficient data[2] | |
| Hispanic | 484 | 3.8 (2.3-6.3) | 251 | 2.0 (1.0-3.8) | Insufficient data[2] | |
| Asian, non-Hispanic | 127 | 2.2 (1.0-4.8) | Insufficient data[2] | | Insufficient data[2] | |
| Other, non-Hispanic | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Age (years)** | | | | | | |
| <20 | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| 20-29 | 1,403 | 6.7 (4.5-9.9) | 625 | 3.0 (1.6-5.4) | 331 | 1.6 (0.6-4.2) |
| 30-39 | 1,680 | 4.2 (2.7-6.4) | 985 | 2.5 (1.4-4.3) | 235 | 0.6 (0.2-1.7) |
| 40+ | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | |
| <High school | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| High school diploma | 994 | 10.4 (6.4-16.6) | 770 | 8.0 (4.4-14.2) | Insufficient data[2] | |
| Some college | 1,293 | 8.3 (5.2-12.9) | 752 | 4.8 (2.6-8.7) | 321 | 2 (0.7-5.6) |
| College graduate | 771 | 2.3 (1.2-4.3) | Insufficient data[2] | | 0 | 0 (.-.) |
| **Insurance type** | | | | | | |
| Private | 1,311 | 3.3 (2.1-5.3) | 485 | 0.5 (0.1-1.6) | Insufficient data[2] | |
| Medicaid | 1,695 | 7.4 (4.9-11.0) | 1,116 | 0.5 (0.1-1.6) | 417 | 1.8 (0.8-4.2) |
| Other | 0 | 0 (.-.) | 0 | 0.5 (0.1-1.6) | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 870 | 6.7 (4.0-11.0) | 578 | 4.4 (2.3-8.3) | Insufficient data[2] | |
| >100% FPL | 2,294 | 4.6 (3.2-6.5) | 1,114 | 2.2 (1.3-3.7) | 490 | 1.0 (0.4-2.3) |
| **Nativity** | | | | | | |
| Non-US-born | 242 | 1.3 (0.7-2.4) | 116 | 0.6 (0.3-1.5) | Insufficient data[2] | |
| US-born | 2,935 | 6.3 (4.6-8.6) | 1,588 | 3.4 (2.2-5.2) | 513 | 1.1 (0.5-2.4) |
| **Marital status** | | | | | | |
| Unmarried | 2,033 | 9.7 (6.8-13.7) | 1,148 | 5.5 (3.4-8.6) | 384 | 1.8 (0.8-4.4) |
| Married | 1,144 | 2.6 (1.5-4.2) | 556 | 1.2 (0.6-2.7) | Insufficient data[2] | |
| **Disability status** | | | | | | |
| No | 2,531 | 4.3 (3.1-6.0) | 1,359 | 2.3 (1.5-3.7) | 516 | 0.9 (0.4-2.0) |
| Yes | 646 | 9.7 (5.1-17.6) | 345 | 5.2 (2.4-11.2) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]E-smoking in the past 2 years; [4]E-smoking in the 3 months prior to pregnancy; [5]E-smoking in the last 3 months of pregnancy

## Table 40. Prevalence of e-smoking prior to pregnancy and during pregnancy, by sociodemographic characteristics, MA PRAMS, 2020

| | E-cigarettes/vaping last 2 years[3] | | E-cigarettes/vaping 3 months prior pregnancy[4] | | E-cigarettes/vaping last 3 months of pregnancy[5] | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 3,262 | 5.2 (3.7-7.3) | 2,442 | 3.9 (2.6-5.8) | 649 | 1.0 (0.5-2.2) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 2,436 | 6.7 (4.3-10.3) | 1,936 | 5.3 (3.2-8.6) | 603 | 1.7 (0.7-3.6) |
| Black, non-Hispanic | 234 | 3.7 (2.0-6.8) | 138 | 2.2 (1.0-4.8) | Insufficient data[2] | |
| Hispanic | 466 | 3.6 (2.1-6.1) | 324 | 2.5 (1.3-4.8) | Insufficient data[2] | |
| Asian, non-Hispanic | 125 | 2.1 (0.9-4.5) | Insufficient data[2] | | 0 | 0 (.-.) |
| Other, non-Hispanic | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Age (years)** | | | | | | |
| <20 | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| 20-29 | 2,045 | 10 (6.4-15.2) | 1,446 | 7.1 (4.1-11.9) | Insufficient data[2] | |
| 30-39 | 753 | 2.0 (1.1-3.9) | 734 | 2.0 (1.0-4.0) | Insufficient data[2] | |
| 40+ | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | |
| <High school | 409 | 8.6 (3.0-22.2) | Insufficient data[2] | | Insufficient data[2] | |
| High school diploma | 1,030 | 10.6 (5.9-18.2) | 786 | 8.0 (3.9-15.7) | Insufficient data[2] | |
| Some college | 1,265 | 9.8 (5.5-16.7) | 1,027 | 7.9 (4.1-14.7) | Insufficient data[2] | |
| College graduate | 557 | 1.6 (0.8-3.3) | 446 | 1.3 (0.5-3.1) | 0 | 0 (.-.) |
| **Insurance type** | | | | | | |
| Private | 1,243 | 3.4 (1.8-6.1) | 960 | 2.6 (1.3-5.3) | Insufficient data[2] | |
| Medicaid | 1,866 | 8.2 (5.3-12.4) | 1,228 | 5.5 (3.2-9.1) | 548 | 2.4 (1.1-5.3) |
| Other | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 652 | 5.6 (3.0-10.0) | 362 | 3.1 (1.5-6.4) | Insufficient data[2] | |
| >100% FPL | 2,326 | 4.9 (3.2-7.5) | 1,824 | 3.9 (2.4-6.2) | 518 | 1.1 (0.5-2.5) |
| **Nativity** | | | | | | |
| Non-US-born | 172 | 0.8 (0.4-1.7) | 198 | 0.9 (0.3-2.7) | Insufficient data[2] | |
| US-born | 3,089 | 7.5 (5.2-10.6) | 2,244 | 5.4 (3.5-8.3) | 634 | 1.5 (0.7-3.2) |
| **Marital status** | | | | | | |
| Unmarried | 2,552 | 13.2 (9.1-18.7) | 1,793 | 9.4 (6.0-14.4) | 649 | 3.4 (1.6-6.9) |
| Married | 709 | 1.6 (0.7-3.5) | 650 | 1.5 (0.6-3.4) | 0 | 0 (.-.) |
| **Disability status** | | | | | | |
| No | 2,903 | 5.2 (3.6-7.6) | 2,216 | 4.0 (2.6-6.1) | 548 | 1.0 (0.4-2.2) |
| Yes | 331 | 4.9 (2.2-10.7) | Insufficient data[2] | | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]E-smoking in the past 2 years; [4]E-smoking in the 3 months prior to pregnancy; [5]E-smoking in the last 3 months of pregnancy

## Table 41. Prevalence of e-smoking prior to pregnancy and during pregnancy, by sociodemographic characteristics, MA PRAMS, 2021

| | E-cigarettes/vaping last 2 years[3] | | E-cigarettes/vaping 3 months prior pregnancy[4] | | E-cigarettes/vaping last 3 months of pregnancy[5] | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 3,562 | 5.4 (3.9-7.5) | 2,554 | 3.9 (2.6-5.7) | 1,065 | 1.6 (0.8-3.2) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 2,516 | 6.4 (4.1-9.8) | 1,732 | 4.4 (2.6-7.4) | 973 | 2.5 (1.2-5.1) |
| Black, non-Hispanic | 300 | 4.6 (2.6-8.2) | 180 | 2.8 (1.3-5.8) | 0 | 0 (.-.) |
| Hispanic | 585 | 4.4 (2.6-7.4) | 482 | 3.6 (2.0-6.5) | Insufficient data[2] | |
| Asian, non-Hispanic | 125 | 2.5 (1.0-6.0) | 125 | 2.5 (1.0-6.0) | Insufficient data[2] | |
| Other, non-Hispanic | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Age (years)** | | | | | | |
| <20 | 314 | 29.2 (13.1-53.1) | 247 | 23 (8.4-49.3) | Insufficient data[2] | |
| 20-29 | 1,313 | 7.0 (4.2-11.5) | 1,264 | 6.8 (4.0-11.2) | Insufficient data[2] | |
| 30-39 | 1,835 | 4.2 (2.6-6.8) | 1,043 | 2.4 (1.2-4.5) | 620 | 1.4 (0.6-3.6) |
| 40+ | Insufficient data[2] | | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Education** | | | | | | |
| <High school | 375 | 8.4 (3.1-20.7) | 345 | 7.7 (2.6-20.4) | Insufficient data[2] | |
| High school diploma | 1,253 | 12.9 (7.5-21.4) | 996 | 10.2 (5.5-18.2) | 527 | 5.4 (2.2-12.9) |
| Some college | 995 | 7.7 (4.4-13.1) | 833 | 6.5 (3.5-11.7) | Insufficient data[2] | |
| College graduate | 939 | 2.5 (1.2-5.0) | Insufficient data[2] | | Insufficient data[2] | |
| **Insurance type** | | | | | | |
| Private | 1,158 | 2.9 (1.6-5.3) | 661 | 1.7 (0.8-3.7) | Insufficient data[2] | |
| Medicaid | 2,202 | 9.7 (6.5-14.3) | 1,655 | 7.3 (4.6-11.5) | 758 | 3.3 (1.5-7.3) |
| Other | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 1,236 | 10.7 (6.2-17.9) | 1,183 | 10.2 (5.8-17.4) | 445 | 3.8 (1.4-10.0) |
| >100% FPL | 2,101 | 4.1 (2.7-6.2) | 1,307 | 2.6 (1.5-4.3) | 620 | 1.2 (0.5-3.1) |
| **Nativity** | | | | | | |
| Non-US-born | 233 | 1.1 (0.5-2.4) | 204 | 1.0 (0.4-2.3) | Insufficient data[2] | |
| US-born | 3,329 | 7.4 (5.2-10.3) | 2,350 | 5.2 (3.5-7.8) | 1,028 | 2.3 (1.1-4.6) |
| **Marital status** | | | | | | |
| Unmarried | 2,546 | 12.4 (8.3-17.9) | 1,875 | 9.1 (5.7-14.1) | 827 | 4.0 (1.8-8.7) |
| Married | 1,016 | 2.2 (1.3-3.8) | 679 | 1.5 (0.8-2.8) | Insufficient data[2] | |
| **Disability status** | | | | | | |
| No | 2,803 | 4.9 (3.3-7.1) | 1,807 | 3.1 (1.9-5.0) | 965 | 1.7 (0.8-3.4) |
| Yes | 658 | 8.7 (4.4-16.5) | 646 | 8.4 (4.2-16.3) | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]E-smoking in the past 2 years; [4]E-smoking in the 3 months prior to pregnancy; [5]E-smoking in the last 3 months of pregnancy

## Table 42. Prevalence of e-smoking two years prior to pregnancy, by sociodemographic characteristics, MA PRAMS, 2019-2021

| | E-cigarettes/vaping last 2 years prior to pregnancy | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 3,177 | 4.8 (3.6-6.5) | 3,262 | 5.2 (3.7-7.3) | 3,562 | 5.4 (3.9-7.5) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 2,345 | 6.0 (4.1-8.6) | 2,436 | 6.7 (4.3-10.3) | 2,516 | 6.4 (4.1-9.8) |
| Black, non-Hispanic | 203 | 3.2 (1.8-5.6) | 234 | 3.7 (2.0-6.8) | 300 | 4.6 (2.6-8.2) |
| Hispanic | 484 | 3.8 (2.3-6.3) | 466 | 3.6 (2.1-6.1) | 585 | 4.4 (2.6-7.4) |
| Asian, non-Hispanic | 127 | 2.2 (1.0-4.8) | 125 | 2.1 (0.9-4.5) | 125 | 2.5 (1.0-6.0) |
| Other, non-Hispanic | Insufficient data[2] | | 0 | 0 (.-.) | Insufficient data[2] | |
| **Age (years)** | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | 314 | 29.2 (13.1-53.1) |
| 20-29 | 1,403 | 6.7 (4.5-9.9) | 2,045 | 10 (6.4-15.2) | 1,313 | 7.0 (4.2-11.5) |
| 30-39 | 1,680 | 4.2 (2.7-6.4) | 753 | 2.0 (1.1-3.9) | 1,835 | 4.2 (2.6-6.8) |
| 40+ | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Education** | | | | | | |
| <High school | Insufficient data[2] | | 409 | 8.6 (3.0-22.2) | 375 | 8.4 (3.1-20.7) |
| High school diploma | 994 | 10.4 (6.4-16.6) | 1,030 | 10.6 (5.9-18.2) | 1,253 | 12.9 (7.5-21.4) |
| Some college | 1,293 | 8.3 (5.2-12.9) | 1,265 | 9.8 (5.5-16.7) | 995 | 7.7 (4.4-13.1) |
| College graduate | 771 | 2.3 (1.2-4.3) | 557 | 1.6 (0.8-3.3) | 939 | 2.5 (1.2-5.0) |
| **Insurance type** | | | | | | |
| Private | 1,311 | 3.3 (2.1-5.3) | 1,243 | 3.4 (1.8-6.1) | 1,158 | 2.9 (1.6-5.3) |
| Medicaid | 1,695 | 7.4 (4.9-11.0) | 1,866 | 8.2 (5.3-12.4) | 2,202 | 9.7 (6.5-14.3) |
| Other | 0 | 0 (.-.) | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 870 | 6.7 (4.0-11.0) | 652 | 5.6 (3.0-10.0) | 1,236 | 10.7 (6.2-17.9) |
| >100% FPL | 2,294 | 4.6 (3.2-6.5) | 2,326 | 4.9 (3.2-7.5) | 2,101 | 4.1 (2.7-6.2) |
| **Nativity** | | | | | | |
| Non-US-born | 242 | 1.3 (0.7-2.4) | 172 | 0.8 (0.4-1.7) | 233 | 1.1 (0.5-2.4) |
| US-born | 2,935 | 6.3 (4.6-8.6) | 3,089 | 7.5 (5.2-10.6) | 3,329 | 7.4 (5.2-10.3) |
| **Marital status** | | | | | | |
| Unmarried | 2,033 | 9.7 (6.8-13.7) | 2,552 | 13.2 (9.1-18.7) | 2,546 | 12.4 (8.3-17.9) |
| Married | 1,144 | 2.6 (1.5-4.2) | 709 | 1.6 (0.7-3.5) | 1,016 | 2.2 (1.3-3.8) |
| **Disability status** | | | | | | |
| No | 2,531 | 4.3 (3.1-6.0) | 2,903 | 5.2 (3.6-7.6) | 2,803 | 4.9 (3.3-7.1) |
| Yes | 646 | 9.7 (5.1-17.6) | 331 | 4.9 (2.2-10.7) | 658 | 8.7 (4.4-16.5) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 43. Prevalence of e-smoking three months prior to pregnancy, by sociodemographic characteristics, MA PRAMS, 2019-2021

| | E-cigarettes/vaping 3 months prior pregnancy | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 1,704 | 2.6 (1.7-3.9) | 2,442 | 3.9 (2.6-5.8) | 2,554 | 3.9 (2.6-5.7) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 1,211 | 3.1 (1.8-5.3) | 1,936 | 5.3 (3.2-8.6) | 1,732 | 4.4 (2.6-7.4) |
| Black, non-Hispanic | 174 | 2.7 (1.4-5.0) | 138 | 2.2 (1.0-4.8) | 180 | 2.8 (1.3-5.8) |
| Hispanic | 251 | 2.0 (1.0-3.8) | 324 | 2.5 (1.3-4.8) | 482 | 3.6 (2.0-6.5) |
| Asian, non-Hispanic | Insufficient data[2] | | Insufficient data[2] | | 125 | 2.5 (1.0-6.0) |
| Other, non-Hispanic | 0 | 0 (.-.) | 0 | 0 (.-.) | Insufficient data[2] | |
| **Age (years)** | | | | | | |
| <20 | 0 | 0 (.-.) | Insufficient data[2] | | 247 | 23 (8.4-49.3) |
| 20-29 | 625 | 3.0 (1.6-5.4) | 1,446 | 7.1 (4.1-11.9) | 1,264 | 6.8 (4-11.2) |
| 30-39 | 985 | 2.5 (1.4-4.3) | 734 | 2.0 (1.0-4.0) | 1,043 | 2.4 (1.2-4.5) |
| 40+ | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | |
| <High school | Insufficient data[2] | | Insufficient data[2] | | 345 | 7.7 (2.6-20.4) |
| High school diploma | 770 | 8.0 (4.4-14.2) | 786 | 8.0 (3.9-15.7) | 996 | 10.2 (5.5-18.2) |
| Some college | 752 | 4.8 (2.6-8.7) | 1,027 | 7.9 (4.1-14.7) | 833 | 6.5 (3.5-11.7) |
| College graduate | Insufficient data[2] | | 446 | 1.3 (0.5-3.1) | Insufficient data[2] | |
| **Insurance type** | | | | | | |
| Private | 485 | 0.5 (0.1-1.6) | 960 | 2.6 (1.3-5.3) | 661 | 1.7 (0.8-3.7) |
| Medicaid | 1,116 | 0.5 (0.1-1.6) | 1,228 | 5.5 (3.2-9.1) | 1,655 | 7.3 (4.6-11.5) |
| Other | 0 | 0.5 (0.1-1.6) | Insufficient data[2] | | Insufficient data[2] | |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 578 | 4.4 (2.3-8.3) | 362 | 3.1 (1.5-6.4) | 1,183 | 10.2 (5.8-17.4) |
| >100% FPL | 1,114 | 2.2 (1.3-3.7) | 1,824 | 3.9 (2.4-6.2) | 1,307 | 2.6 (1.5-4.3) |
| **Nativity** | | | | | | |
| Non-US-born | 116 | 0.6 (0.3-1.5) | 198 | 0.9 (0.3-2.7) | 204 | 1.0 (0.4-2.3) |
| US-born | 1,588 | 3.4 (2.2-5.2) | 2,244 | 5.4 (3.5-8.3) | 2,350 | 5.2 (3.5-7.8) |
| **Marital status** | | | | | | |
| Unmarried | 1,148 | 5.5 (3.4-8.6) | 1,793 | 9.4 (6.0-14.4) | 1,875 | 9.1 (5.7-14.1) |
| Married | 556 | 1.2 (0.6-2.7) | 650 | 1.5 (0.6-3.4) | 679 | 1.5 (0.8-2.8) |
| **Disability status** | | | | | | |
| No | 1,359 | 2.3 (1.5-3.7) | 2,216 | 4.0 (2.6-6.1) | 1,807 | 3.1 (1.9-5.0) |
| Yes | 345 | 5.2 (2.4-11.2) | Insufficient data[2] | | 646 | 8.4 (4.2-16.3) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 44. Prevalence of e-smoking during last three months of pregnancy, by sociodemographic characteristics, MA PRAMS, 2019-2021

| | E-cigarettes/vaping last three months of pregnancy | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 566 | 0.9 (0.4-1.8) | 649 | 1.0 (0.5-2.2) | 1,065 | 1.6 (0.8-3.2) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 424 | 1.1 (0.4-2.8) | 603 | 1.7 (0.7-3.6) | 973 | 2.5 (1.2-5.1) |
| Black, non-Hispanic | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| Hispanic | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| Asian, non-Hispanic | Insufficient data[2] | | 0 | 0 (.-.) | Insufficient data[2] | |
| Other, non-Hispanic | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Age (years)** | | | | | | |
| <20 | 0 | 0 (.-.) | 0 | 0 (.-.) | Insufficient data[2] | |
| 20-29 | 331 | 1.6 (0.6-4.2) | Insufficient data[2] | | Insufficient data[2] | |
| 30-39 | 235 | 0.6 (0.2-1.7) | Insufficient data[2] | | 620 | 1.4 (0.6-3.6) |
| 40+ | 0 | 0 (.-.) | Insufficient data[2] | | 0 | 0 (.-.) |
| **Education** | | | | | | |
| <High school | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| High school diploma | Insufficient data[2] | | Insufficient data[2] | | 527 | 5.4 (2.2-12.9) |
| Some college | 321 | 2.0 (0.7-5.6) | Insufficient data[2] | | Insufficient data[2] | |
| College graduate | 0 | 0 (.-.) | 0 | 0 (.-.) | Insufficient data[2] | |
| **Insurance type** | | | | | | |
| Private | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| Medicaid | 417 | 1.8 (0.8-4.2) | 548 | 2.4 (1.1-5.3) | 758 | 3.3 (1.5-7.3) |
| Other | 0 | 0 (.-.) | 0 | 0 (.-.) | 0 | 0 (.-.) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | Insufficient data[2] | | Insufficient data[2] | | 445 | 3.8 (1.4-10) |
| >100% FPL | 490 | 1.0 (0.4-2.3) | 518 | 1.1 (0.5-2.5) | 620 | 1.2 (0.5-3.1) |
| **Nativity** | | | | | | |
| Non-US-born | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| US-born | 513 | 1.1 (0.5-2.4) | 634 | 1.5 (0.7-3.2) | 1,028 | 2.3 (1.1-4.6) |
| **Marital status** | | | | | | |
| Unmarried | 384 | 1.8 (0.8-4.4) | 649 | 3.4 (1.6-6.9) | 827 | 4.0 (1.8-8.7) |
| Married | Insufficient data[2] | | 0 | 0 (.-.) | Insufficient data[2] | |
| **Disability status** | | | | | | |
| No | 516 | 0.9 (0.4-2.0) | 548 | 1.0 (0.4-2.2) | 965 | 1.7 (0.8-3.4) |
| Yes | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 45. Prevalence of drinking alcohol in the three months prior to pregnancy by sociodemographic characteristics, MA PRAMS, 2019-2021

| | Alcohol in three months prior to pregnancy | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 42,704 | 65.0 (62.2-67.7) | 40,641 | 64.4 (61.3-67.3) | 43,004 | 65.2 (62.2-68.1) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 30,334 | 77.2 (72.9-81.0) | 28,625 | 79.1 (74.1-83.3) | 31,126 | 79.7 (75.1-83.7) |
| Black, non-Hispanic | 2,691 | 41.7 (36.1-47.4) | 2,611 | 41.4 (35.9-47.2) | 2,711 | 41.9 (36.2-47.8) |
| Hispanic | 6,303 | 49.2 (44.3-54.1) | 6,419 | 48.1 (42.9-53.4) | 5,847 | 43.1 (38.0-48.5) |
| Asian, non-Hispanic | 2,446 | 42.6 (37.2-48.1) | 2,310 | 38.4 (33.0-44.1) | 2,315 | 45.9 (39.7-52.3) |
| Other, non-Hispanic | 331 | 52.7 (34.9-69.9) | 169 | 41.4 (21.3-64.9) | 125 | 41.3 (18.6-68.4) |
| **Age (years)** | | | | | | |
| <20 | 420 | 40.3 (22.6-61.0) | 544 | 40.0 (20.9-62.7) | 403 | 36.4 (19.4-57.7) |
| 20-29 | 11,635 | 55.4 (50.3-60.4) | 12,654 | 60.9 (55.1-66.4) | 10,826 | 57.7 (51.8-63.4) |
| 30-39 | 28,796 | 71.6 (68.1-74.9) | 24,802 | 67.4 (63.3-71.2) | 30,449 | 69.7 (65.9-73.3) |
| 40+ | 1,854 | 53.4 (39.9-66.4) | 2,641 | 63.4 (51.5-73.9) | 1,326 | 54.4 (37.8-70.1) |
| **Education** | | | | | | |
| <High school | 1,209 | 25.0 (17.7-33.9) | 1,382 | 28.6 (20.2-38.8) | 1,058 | 23.5 (15.3-34.1) |
| High school diploma | 4,617 | 48.2 (40.9-55.6) | 4,840 | 50.5 (41.7-59.3) | 4,297 | 45.2 (36.4-54.2) |
| Some college | 9,783 | 62.3 (56.2-67.9) | 7,578 | 57.9 (50.2-65.2) | 8,321 | 63.9 (56.4-70.8) |
| College graduate | 0 | (-) | 26,077 | 75.9 (72.2-79.3) | 28,702 | 76.6 (72.8-80.0) |
| **Insurance type** | | | | | | |
| Private | 30,170 | 76.9 (73.4-80.1) | 28,633 | 77.2 (73.6-80.5) | 30,250 | 77.3 (73.5-80.6) |
| Medicaid | 10,942 | 47.4 (42.7-52.1) | 10.425 | 45.8 (40.4-51.3) | 10,299 | 45.4 (39.8-51.0) |
| Other | 989 | 56.2 (38.8-72.2) | 712 | 55.4 (33.6-75.3) | 1,163 | 59.9 (39.9-77.0) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 5,583 | 42.6 (36.6-48.7) | 4,870 | 42.1 (34.9-49.7) | 4,727 | 40.5 (33.1-48.3) |
| >100% FPL | 36,434 | 73.0 (69.8-76.0) | 34,129 | 72.4 (68.9-75.6) | 37,217 | 73.1 (69.7-76.3) |
| **Nativity** | | | | | | |
| Non-US-born | 7,309 | 38.6 (34.3-43.0) | 8,303 | 38.0 (33.6-42.6) | 7,356 | 35.0 (30.7-39.7) |
| US-born | 35,394 | 75.7 (72.1-79.0) | 32,337 | 78.3 (74.3-81.9) | 35,648 | 79.3 (75.5-82.6) |
| **Marital status** | | | | | | |
| Unmarried | 12,256 | 58.0 (52.9-62.9) | 11,720 | 60.6 (54.5-66.3) | 12,407 | 59.6 (53.6-65.4) |
| Married | 30,447 | 68.3 (64.9-71.5) | 28,920 | 66.0 (62.4-69.5) | 30,597 | 67.8 (64.1-71.2) |
| **WIC participation** | | | | | | |
| No | 33,696 | 75.1 (71.8-78.2) | 30,983 | 73.0 (69.4-76.3) | 34,029 | 72.8 (69.1-76.3) |
| Yes | 8,764 | 42.8 (38.1-47.7) | 9,606 | 46.7 (41.1-52.4) | 8,920 | 46.8 (40.9-52.7) |
| **Disability status** | | | | | | |
| No | 38,591 | 66.0 (63.1-68.9) | 36,234 | 65.2 (61.9-68.3) | 38,004 | 66.0 (62.6-69.1) |
| Yes | 3,802 | 55.9 (46.6-64.8) | 4,171 | 61.7 (51.2-71.3) | 4,829 | 63.9 (54.9-71.9) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 46. Prescription Pain Medication Use and Other Substance Use During Pregnancy

**Opioid Supplement 2019-2021**

| | 2019 | | 2020 | | 2021 | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Did person use any of these over-the-counter pain relievers during pregnancy?** | 49,059 | 74.9 (72.1-77.5) | 44,830 | 71.6 (68.5-74.6) | 49,037 | 75.2 (72.1-78.1) |
| Acetaminophen | 45,243 | 69.2 (66.3-72.0) | 41,227 | 66.0 (62.7-69.2) | 44,683 | 70.1 (66.8-73.1) |
| Ibuprofen | 10,061 | 15.7 (13.6-18.0) | 9,313 | 15.2 (12.8-17.9) | 9,264 | 14.8 (12.6-17.3) |
| Aspirin | 4,930 | 7.7 (6.2-9.6) | 5,755 | 9.5 (7.7-11.5) | 7,590 | 12.0 (10.0-14.5) |
| Naproxen | 991 | 1.6 (1.0-2.5) | 1,730 | 2.9 (1.7-4.7) | 667 | 1.1 (0.6-1.8) |
| **Did person use these prescription pain relievers during pregnancy?** | 7,798 | 6.1 (5.1-7.3) | 3,698 | 6.0 (4.5-7.9) | Insufficient data[2] | |
| Hydrocodone | 298 | 0.5 (0.2-1.0) | 426 | 0.7 (0.3-1.3) | 227 | 0.4 (0.2-0.7) |
| Codeine | 1,664 | 2.5 (1.9-3.3) | 1,886 | 3.0 (2.1-4.3) | 1,627 | 2.6 (1.8-3.7) |
| Oxycodone | 1,605 | 2.5 (1.8-3.4) | 1,380 | 2.2 (1.4-3.5) | 1,776 | 2.8 (1.8-4.3) |
| Tramadol | 278 | 0.4 (0.2-1.1) | 283 | 0.5 (0.2-1.0) | 141 | 0.2 (0.1-0.6) |
| Hydromorphone | 378 | 0.6 (0.2-1.4) | 286 | 0.5 (0.2-1.3) | 569 | 0.9 (0.4-1.9) |
| Oxymorphone | 118 | 0.2 (0.1-0.4) | Insufficient data[2] | | Insufficient data[2] | |
| Morphine | 582 | 0.9 (0.5-1.7) | 518 | 0.8 (0.4-1.5) | 655 | 1.0 (0.5-2.1) |
| Fentanyl | 387 | 0.6 (0.2-1.4) | 613 | 1.0 (0.4-2.5) | 552 | 0.9 (0.4-2.0) |
| **From where did person obtain the prescription pain relievers during pregnancy?** | | | | | | |
| OB-GYN, midwife, prenatal care provider | 2,473 | 60.3 (48.2-71.3) | 2,101 | 56.8 (41.6-70.8) | 2,112 | 54.5 (40.5-67.8) |
| Family doctor, Primary care doctor | 663 | 16.2 (9.8-25.4) | 595 | 16.1 (7.5-31.2) | 479 | 12.4 (5.8-24.3) |
| Dentist/ Oral Health care provider | 175 | 4.3 (1.8-9.7) | Insufficient data[2] | | Insufficient data[2] | |
| Emergency Department visit | 1,209 | 29.5 (20.1-41.0) | 706 | 19.1 (10.5-32.3) | 904 | 23.3 (13.7-36.9) |
| Left over from older prescription | 297 | 7.2 (3.0-16.5) | Insufficient data[2] | | Insufficient data[2] | |
| Friend/Family member | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| Gotten without a prescription | 407 | 9.9 (4.2-21.6) | 673 | 18.2 (7.7-37.3) | 430 | 11.1 (4.0-27.4) |
| **What were the reasons for using prescription pain relievers during pregnancy?** | | | | | | |
| To relieve pain from condition that started before pregnancy | 908 | 22.2 (13.4-34.3) | 557 | 15.0 (6.9-29.7) | 650 | 16.8 (8.2-31.3) |
| To relieve pain from condition that started during pregnancy | 1,909 | 46.6 (35.5-57.9) | 1,664 | 45.0 (31.4-59.4) | 2,052 | 53 (39.4-66.1) |
| To relax or relieve tension or stress | 536 | 13.1 (6.7-23.9) | 427 | 11.5 (4.2-28.0) | 385 | 9.9 (4.0-22.5) |
| To help with feelings or emotions | 402 | 9.8 (4.1-21.5) | Insufficient data[2] | | Insufficient data[2] | |
| To help sleep | 685 | 16.7 (9.6-27.4) | 539 | 14.6 (5.4-33.7) | 343 | 8.9 (3.3-21.7) |
| To feel good or get high | 364 | 8.9 (3.5-20.8) | Insufficient data[2] | | 412 | 10.6 (0.0-21.7) |
| Because I was "hooked" or had to have them | 357 | 8.7 (3.3-20.8) | Insufficient data[2] | | Insufficient data[2] | |
| **Did pregnant person want or need to cut down or stop during pregnancy?** | | | | | | |
| No | 2,752 | 70.9 (58.6-80.7) | 2,411 | 68 (50.6-81.5) | 3,137 | 82.9 (68.4-91.6) |
| Yes | 1,129 | 29.1 (19.3-41.4) | 1,136 | 32 (18.5-49.4) | 646 | 17.1 (8.4-31.6) |
| **Did pregnant person have trouble cutting down or stopping during pregnancy?** | | | | | | |
| No | 814 | 70.5 (43.8-88.0) | 449 | 39.5 (16.3-68.6) | 374 | 54.8 (22.2-83.7) |
| Yes | 340 | 29.5 (12.0-56.1) | 687 | 60.5 (31.4-83.7) | 309 | 45.2 (16.3-77.8) |
| **Did pregnant person get help to cut down or stop during pregnancy?** | | | | | | |
| No | 631 | 55.8 (32.8-76.6) | 363 | 31.1 (12.9-57.9) | 456 | 61.8 (27.8-87.2) |
| Yes | 499 | 44.2 (23.4-67.2) | 804 | 68.9 (42.1-87.1) | 281 | 38.2 (12.8-72.2) |
| **Of pregnant people who said they received help to cut down or stop, did they receive medication-assisted treatment?** | | | | | | |

## Table 46. Prescription Pain Medication Use and Other Substance Use During Pregnancy

**Opioid Supplement 2019-2021**

| | 2019 | | 2020 | | 2021 | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| No | 166 | 34.2 (11.8-66.9) | 285 | 35.4 (8.4-76.7) | Insufficient data[2] | |
| Yes | 320 | 65.8 (33.1-88.2) | Insufficient data[2] | | Insufficient data[2] | |
| **Did pregnant person think prescription pain relievers during pregnancy can be harmful to the baby?** | | | | | | |
| Not harmful at all | 2,622 | 4.2 (3.4-5.3) | 2,551 | 4.3 (3.4-5.5) | 1,300 | 2.1 (1.6-2.9) |
| Not harmful if taken as prescribed | 18,841 | 30.4 (27.7-33.3) | 20,925 | 35.5 (32.3-38.9) | 25,117 | 41.1 (37.7-44.5) |
| Harmful, even if taken as prescribed | 40,458 | 65.3 (62.4-68.1) | 35,446 | 60.2 (56.8-63.5) | 34,739 | 56.8 (53.3-60.2) |
| **Did pregnant person think prescription pain relievers during pregnancy can be harmful to the pregnant person?** | | | | | | |
| Not harmful at all | 3,157 | 5.1 (4.1-6.3) | 2,676 | 4.5 (3.6-5.8) | 2,092 | 3.4 (2.6-4.5) |
| Not harmful if taken as prescribed | 32,270 | 51.7 (48.5-55.0) | 33,065 | 56.1 (52.5-59.7) | 37,352 | 60.8 (57.3-64.3) |
| Harmful, even if taken as prescribed | 26,933 | 43.2 (40.0-46.4) | 23,155 | 39.3 (35.8-42.9) | 21,940 | 35.7 (32.3-39.3) |
| **Did health care professional talk about how prescription pain relievers affect pregnancy?** | | | | | | |
| No | 34,208 | 55.5 (52.3-58.7) | 34,881 | 59.7 (56.2-63.1) | 38,790 | 63.1 (59.8-66.3) |
| Yes | 27,699 | 44.4 (41.3-47.6) | 23,874 | 40.3 (36.9-43.7) | 22,687 | 36.9 (33.7-40.2) |
| **During pregnancy, what medication were used?** | | | | | | |
| Medication for depression | 5,354 | 8.2 (6.5-10.4) | 5,533 | 8.9 (6.9-11.4) | 6,164 | 9.7 (7.6-12.3) |
| Medication for anxiety | 1,844 | 2.8 (1.8-4.4) | 1,842 | 3.0 (1.8-4.7) | 1,222 | 1.9 (1.1-3.3) |
| Methadone/Subutex, suboxone, buprenorphine | 1,240 | 1.9 (1.1-3.3) | 1,062 | 1.7 (0.8-3.5) | 1,540 | 2.4 (1.4-4.3) |
| Naloxone | 335 | 0.5 (0.2-1.5) | 0 | 0 (.-.) | Insufficient data[2] | |
| Cannabidiol (CBD) products | 1,182 | 1.8 (1.1-3.1) | 1,063 | 1.7 (0.9-3.3) | 745 | 1.2 (0.5-2.6) |
| Adderall, Ritalin or other stimulant | 869 | 1.3 (0.7-2.4) | 1,163 | 1.9 (0.9-3.7) | 879 | 1.4 (0.7-2.8) |
| Marijuana or hash | 2,679 | 4.1 (2.9-5.8) | 1,438 | 2.3 (1.4-3.8) | 2,425 | 3.8 (2.5-5.7) |
| synthetic marijuana K2, Spice | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| Heroin | 400 | 0.6 (0.2-1.6) | Insufficient data[2] | | Insufficient data[2] | |
| Amphetamines | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| Cocaine | 281 | 0.4 (0.1-1.3) | Insufficient data[2] | | Insufficient data[2] | |
| Tranquilizers | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| Hallucinogens | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| Sniffing gasoline, glue, aerosol spray cans/paint | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |

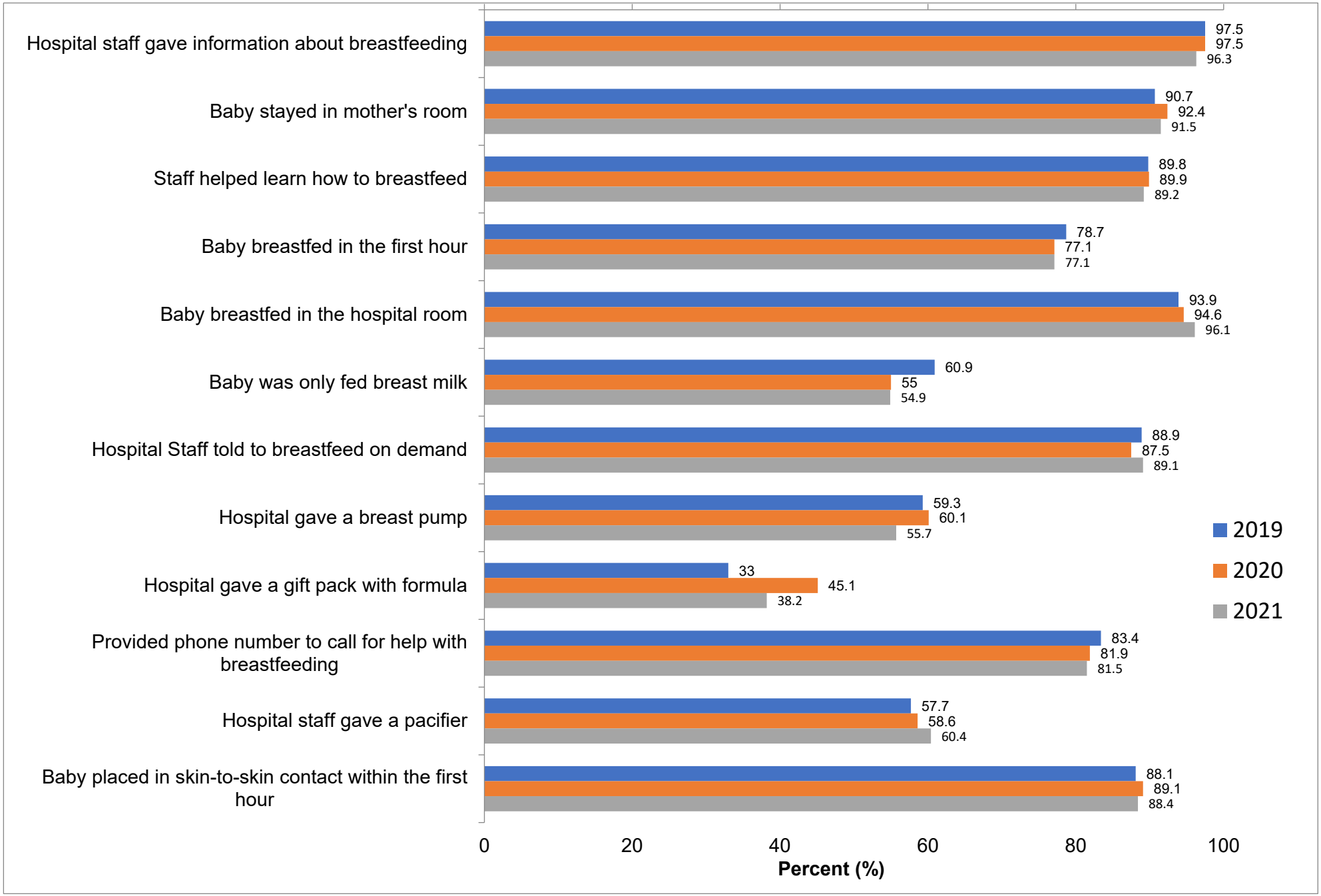
[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

Table 47. Prevalence of breastfeeding initiation and duration of at least 8 weeks by sociodemographic characteristics, MA PRAMS, 2019-2021

| | 2019 | | | | 2020 | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Breastfeeding initiation | | Breastfeeding duration for at least 8 weeks | | Breastfeeding initiation | | Breastfeeding duration for at least 8 weeks | | Breastfeeding initiation | | Breastfeeding duration for at least 8 weeks | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 59,798 | 91.6 (89.6-93.3) | 47,961 | 73.8 (71.0-76.5) | 56,851 | 91.0 (88.6-93.0) | 46,246 | 74.2 (71.0-77.3) | 59,515 | 91.3 (89.0-93.2) | 47,458 | 73.1 (69.8-76.2) |
| **Race/ethnicity** | | | | | | | | | | | | |
| White, non-Hispanic | 35,605 | 90.7 (87.5-93.1) | 29,198 | 74.6 (70.2-78.5) | 32,567 | 89.7 (85.7-92.7) | 26,443 | 73.1 (67.8-77.8) | 34,767 | 89.9 (86.1-92.8) | 28,251 | 73.3 (68.1-77.8) |
| Black, non-Hispanic | 5,952 | 94.3 (91.2-96.3) | 5,153 | 82.3 (77.9-86.1) | 5,674 | 93.5 (90.5-95.6) | 5,044 | 83.1 (78.7-86.8) | 5,844 | 92.8 (88.6-95.5) | 4,767 | 76.5 (70.9-81.3) |
| Hispanic | 11,743 | 93.3 (90.5-95.4) | 8,027 | 64.5 (59.6-69.2) | 11,877 | 91.4 (87.6-94.1) | 8,744 | 67.3 (62.0-72.2) | 12,372 | 92.3 (88.9-94.7) | 8,979 | 66.8 (61.5-71.7) |
| Asian, non-Hispanic | 5,387 | 94.2 (90.7-96.5) | 4,817 | 84.7 (80.0-88.5) | 5,643 | 94.7 (90.9-96.9) | 5,036 | 85.0 (80.0-88.9) | 4,718 | 95.3 (91.3-97.5) | 4,092 | 82.7 (76.9-87.2) |
| Other, non-Hispanic | 585 | 93.2 (76.8-98.3) | 466 | 74.4 (55.5-87.1) | 352 | 94.2 (69.1-99.2) | 243 | 65.0 (40.0-83.8) | 268 | 88.3 (50.4-98.3) | 143 | 47.2 (22.6-73.3) |
| **Age (years)** | | | | | | | | | | | | |
| <20 | 971 | 93.3 (80.3-97.9) | 541 | 52.0 (32.6-70.8) | 1,271 | 91.6 (65.2-98.4) | 633 | 47.9 (27.5-69.1) | 904 | 84.0 (66.7-93.2) | 468 | 44.7 (27.1-63.8) |
| 20-29 | 18,827 | 90.5 (86.9-93.3) | 13,859 | 67.5 (62.4-72.1) | 18,251 | 90.7 (86.0-94.0) | 14,119 | 70.0 (63.7-75.6) | 16,617 | 88.9 (83.8-92.6) | 11,487 | 61.4 (54.9-67.4) |
| 30-39 | 36,755 | 91.9 (89.2-94.0) | 30,843 | 77.2 (73.5-80.6) | 33,592 | 91.3 (88.0-93.7) | 28,518 | 77.8 (73.6-81.5) | 39,790 | 92.6 (89.8-94.7) | 33,698 | 78.9 (74.8-82.4) |
| 40+ | 3,245 | 93.8 (84.6-97.6) | 2,717 | 79.3 (65.9-88.3) | 3,738 | 90.4 (78.8-96.0) | 2,977 | 72.0 (58.4-82.5) | 2,203 | 90.4 (72.9-97.0) | 1,804 | 74.5 (56.2-86.9) |
| **Education** | | | | | | | | | | | | |
| <High school | 4,198 | 91.9 (84.0-96.0) | 2,946 | 65.2 (56.0-73.3) | 3,927 | 86.7 (78.0-92.3) | 2,670 | 58.0 (47.9-67.5) | 3,856 | 86.8 (76.7-93.0) | 2,887 | 65.0 (54.9-74.0) |
| High school diploma | 7,822 | 82.7 (75.6-88.0) | 5,614 | 60.6 (53.2-67.6) | 7,575 | 79.3 (69.7-86.5) | 5,250 | 55.4 (46.1-64.3) | 8,266 | 87.1 (78.9-92.4) | 5,050 | 53.2 (44.1-62.1) |
| Some college | 14,058 | 89.6 (85.1-92.8) | 10,075 | 64.4 (58.0-70.2) | 11,544 | 90.2 (83.9-94.1) | 8,230 | 64.8 (56.7-72.2) | 11,516 | 89.2 (82.6-93.5) | 8,157 | 63.3 (55.1-70.8) |
| College graduate | 32,143 | 95.2 (92.5-97.0) | 28,094 | 83.3 (79.4-86.6) | 32,727 | 95.1 (92.5-96.9) | 29,088 | 84.7 (80.7-88.0) | 34,600 | 93.6 (90.7-95.6) | 30,366 | 82.7 (78.6-86.1) |
| **Insurance type** | | | | | | | | | | | | |
| Private | 36,733 | 93.4 (90.7-95.4) | 31,257 | 79.7 (75.8-83.0) | 34,553 | 93.0 (89.9-95.1) | 29,666 | 79.9 (75.7-83.5) | 35,585 | 91.6 (88.3-94.0) | 30,452 | 78.9 (74.6-82.6) |
| Medicaid | 19,942 | 88.4 (84.8-91.2) | 14,389 | 64.4 (59.7-68.8) | 19,613 | 87.9 (83.1-91.5) | 14,304 | 64.4 (58.7-69.7) | 20,306 | 90.8 (86.7-93.7) | 13,915 | 62.1 (56.4-67.6) |
| Other | 1,589 | 90.3 (69.2-97.5) | 1,215 | 69.0 (50.0-83.2) | 1,162 | 91.6 (74.9-97.6) | 943 | 75.6 (53.0-89.5) | 1,924 | 99.1 (93.8-99.9) | 1,757 | 90.5 (77.2-96.4) |
| **Household poverty level** | | | | | | | | | | | | |
| ≤100% FPL | 10,935 | 85.1 (79.7-89.3) | 7,297 | 57.8 (51.5-63.8) | 9,689 | 84.4 (77.6-89.4) | 7,300 | 64.1 (56.5-71.0) | 10,118 | 89.1 (82.8-93.3) | 6,765 | 59.8 (52.0-67.2) |
| >100% FPL | 46,289 | 92.9 (90.6-94.7) | 38,787 | 77.9 (74.7-80.9) | 43,564 | 92.9 (90.2-94.9) | 36,364 | 77.6 (73.8-81.0) | 46,648 | 92.1 (89.4-94.2) | 38,972 | 77.3 (73.5-80.6) |
| **Nativity** | | | | | | | | | | | | |
| Non-US-born | 17,969 | 96.0 (93.9-97.4) | 15,085 | 81.3 (77.7-84.5) | 20,127 | 94.8 (92.6-96.3) | 17,204 | 80.9 (76.8-84.5) | 19,493 | 93.5 (90.8-95.5) | 15,978 | 77.4 (73.2-81.1) |
| US-born | 41,829 | 89.9 (87.2-92.1) | 32,876 | 70.9 (67.1-74.4) | 36,724 | 89.1 (85.6-91.9) | 29,043 | 70.8 (66.3-74.9) | 40,022 | 90.3 (87.0-92.8) | 31,479 | 71.1 (66.6-75.2) |
| **Marital status** | | | | | | | | | | | | |
| Unmarried | 18,376 | 88.7 (84.8-91.7) | 12,588 | 61.3 (56.1-66.3) | 16,732 | 88.3 (82.8-92.2) | 11,245 | 59.9 (53.4-66.0) | 17,796 | 88.4 (83.2-92.1) | 11,764 | 58.6 (51.9-65.0) |
| Married | 41,422 | 93.0 (90.5-94.8) | 35,373 | 79.6 (76.2-82.6) | 40,120 | 92.2 (89.6-94.3) | 35,002 | 80.5 (76.8-83.7) | 41,719 | 92.7 (90.0-94.6) | 35,693 | 79.6 (76.0-82.8) |
| **WIC participation** | | | | | | | | | | | | |
| No | 41,845 | 93.4 (91.0-95.3) | 34,791 | 77.9 (74.4-81.1) | 38,510 | 91.5 (88.4-93.8) | 33,209 | 79.1 (75.1-82.5) | 42,365 | 91.7 (88.8-93.8) | 35,980 | 78.1 (74.2-81.6) |
| Yes | 17,586 | 87.4 (83.5-90.5) | 12,819 | 64.3 (59.4-68.9) | 18,270 | 90.2 (85.9-93.3) | 12,965 | 64.3 (58.4-69.9) | 17,014 | 90.5 (85.9-93.6) | 11,407 | 60.8 (54.7-66.6) |
| **Disability status** | | | | | | | | | | | | |
| No | 53,635 | 92.1 (89.9-93.8) | 43,591 | 75.2 (72.2-78.0) | 50,396 | 91.3 (88.8-93.3) | 41,461 | 75.3 (71.8-78.5) | 51,929 | 91.2 (88.6-93.2) | 42,288 | 74.6 (71.0-77.8) |
| Yes | 5,797 | 87.5 (79.6-92.6) | 4,141 | 63.0 (53.3-71.8) | 5,982 | 88.5 (76.8-94.8) | 4,658 | 69.2 (57.6-78.8) | 7,122 | 94.0 88.0-97.1) | 4,934 | 65.2 (54.9-74.3) |

[1]n weighted to reflect birthing population.

Figure 16. Hospital Breastfeeding Practices, MA PRAMS 2019-2021



## Table 48. Prevalence of infant safe sleep behaviors by sociodemographic characteristics, MA PRAMS, 2019

| | Supine sleep[3] | | Separate sleep surface[4] | | No bed-sharing[5] | | No soft objects/ loose bedding[6] | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 56,738 | 87.5 (85.7-89.1) | 23,631 | 37.3 (34.2-40.5) | 43,806 | 67.8 (64.7-70.7) | 37,523 | 59.4 (56.4-62.4) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 36,970 | 94.6 (91.9-96.5) | 16,287 | 42.1 (37.4-46.9) | 26,316 | 67.6 (62.9-72.0) | 27,053 | 70.3 (65.7-74.6) |
| Black, non-Hispanic | 4,384 | 71.0 (65.1-76.3) | 1,713 | 29.1 (24.3-34.3) | 4,092 | 66.6 (60.6-72.1) | 2,680 | 45.3 (39.6-51.2) |
| Hispanic | 9,185 | 73.0 (68.4-77.1) | 3,792 | 31.2 (26.7-36.0) | 9,023 | 72.0 (67.3-76.3) | 4,910 | 40.3 (35.5-45.4) |
| Asian, non-Hispanic | 4,926 | 88.0 (83.6-91.3) | 1,559 | 29.4 (24.4-34.9) | 3,508 | 62.2 (56.6-67.4) | 2,196 | 41.9 (36.3-47.7) |
| Other, non-Hispanic | 525 | 83.7 (66.3-93.1) | Insufficient data[2] | | 381 | 63.4 (44.4-78.9) | 161 | 27.5 (13.9-47.2) |
| **Age (years)** | | | | | | | | |
| <20 | 461 | 44.3 (26.3-63.8) | 177 | 17.0 (6.9-36.2) | 535 | 51.4 (31.9-70.5) | 384 | 36.9 (20.6-57.0) |
| 20-29 | 17,087 | 83.1 (79.4-86.3) | 6,368 | 31.5 (26.8-36.7) | 14,038 | 68.0 (62.9-72.7) | 9,096 | 45.0 (39.8-50.4) |
| 30-39 | 36,294 | 91.1 (88.9-92.9) | 15,469 | 39.9 (35.8-44.2) | 26,687 | 67.5 (63.4-71.4) | 25,737 | 66.9 (63.0-70.6) |
| 40+ | 2,896 | 84.5 (74.4-91.2) | 1,617 | 47.5 (34.0-61.3) | 2,547 | 74.1 (61.1-83.9) | 2,306 | 68.0 (55.0-78.7) |
| **Education** | | | | | | | | |
| <High school | 3,178 | 70.4 (60.9-78.4) | 799 | 18.1 (12.4-25.6) | 3,368 | 73.8 (64.1-81.6) | 1,270 | 29.9 (22.4-38.5) |
| High school diploma | 7,424 | 80.5 (74.9-85.0) | 2,389 | 26.4 (20.5-33.3) | 6,652 | 71.8 (64.5-78.0) | 3,846 | 41.8 (34.4-49.5) |
| Some college | 13,130 | 83.9 (79.6-85.0) | 4,898 | 32.3 (26.7-38.4) | 10,359 | 66.9 (60.6-72.6) | 6,776 | 45.1 (38.8-51.5) |
| College graduate | 31,422 | 93.3 (90.9-95.1) | 15,058 | 45.7 (41.0-50.4) | 22,285 | 66.5 (62.0-70.7) | 24,656 | 75.0 (71.0-78.6) |
| **Insurance type** | | | | | | | | |
| Private | 36333 | 92.8 (90.5-94.5) | 35,800 | 93.4 (90.8-95.3) | 25,587 | 65.7 (61.5-69.7) | 27385 | 71.5 (67.6-75.2) |
| Medicaid | 18112 | 81.1 (77.6-84.1) | 16,523 | 74.6 (70.1-78.7) | 15,959 | 71.5 (67.0-75.6) | 8564 | 39.6 (34.9-44.5) |
| Other | 1261 | 72.7 (53.3-86.2) | 1,319 | 67.9 (46.1-84.0) | 1,212 | 69.9 (50.8-83.9) | 821 | 51.2 (33.5-68.7) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 9,687 | 76.6 (71.4-81.1) | 3,380 | 27.9 (22.6-33.8) | 8,812 | 69.7 (63.5-75.2) | 4,378 | 36.7 (30.9-42.9) |
| >100% FPL | 45,344 | 91.4 (89.5-93.1) | 19,738 | 40.4 (36.8-44.2) | 33,179 | 67.2 (63.5-70.6) | 32,331 | 66.3 (62.8-69.7) |
| **Nativity** | | | | | | | | |
| Non-US-born | 14,488 | 78.3 (74.6-81.5) | 5,519 | 31.6 (27.5-36.1) | 12,938 | 69.8 (65.6-73.8) | 7,993 | 45.7 (41.2-50.3) |
| US-born | 42,226 | 91.2 (89.0-93.0) | 18,112 | 39.5 (35.6-43.5) | 30,869 | 67.0 (63.0-70.7) | 29,531 | 64.7 (60.9-68.4) |
| **Marital status** | | | | | | | | |
| Unmarried | 16,450 | 80.1 (76.0-83.5) | 6,268 | 31.2 (26.4-36.5) | 14,542 | 70.8 (65.8-75.3) | 8,176 | 40.9 (35.7-46.3) |
| Married | 40,288 | 91.0 (88.9-92.7) | 17,363 | 40.1 (36.3-44.1) | 29,264 | 66.4 (62.5-70.0) | 29,347 | 68.0 (64.4-71.4) |
| **WIC participation** | | | | | | | | |
| No | 40831 | 91.7 (89.4-93.4) | 18,175 | 41.5 (37.5-45.5) | 29,478 | 66.5 (62.6-70.2) | 30,174 | 69.1 (65.4-72.5) |
| Yes | 15595 | 78.3 (74.4-81.6) | 5,300 | 27.5 (23.3-32.2) | 14,238 | 71.4 (66.7-75.7) | 7,099 | 37.2 (32.6-42.1) |
| **Disability status** | | | | | | | | |
| No | 51,333 | 88.5 (86.7-90.2) | 22,023 | 38.8 (35.5-42.2) | 39,193 | 67.9 (64.7-71.0) | 34,347 | 60.9 (57.7-64.0) |
| Yes | 5,135 | 79.2 (71.0-85.5) | 1,472 | 23.4 (16.4-32.2) | 4,278 | 65.6 (56.1-74.1) | 2,924 | 46.3 (36.8-56.0) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Supine sleep: infant placed to sleep on their back; [4]Separate sleep surface: infant sleeps on a separate approved sleep surface (crib, bassinet, or pack and play); [5]No bed-sharing: infant room-sharing without bed-sharing; [6]No soft objects/loose bedding: infant sleeps without soft objects or loose bedding such as blankets, toys, or crib bumper pads

## Table 49. Prevalence of infant safe sleep behaviors by sociodemographic characteristics, MA PRAMS, 2020

| | Supine sleep[3] | | Separate sleep surface[4] | | No bed-sharing[5] | | No soft objects/ loose bedding[6] | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 52,971 | 85.5 (83.4-87.4) | 24,200 | 40.4 (37.0-44.0) | 41,774 | 68.0 (64.7-71.2) | 37,551 | 62.8 (59.5 -66.1) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 33,834 | 94.0 (90.6-96.2) | 15,929 | 45.0 (39.6-50.5) | 23,918 | 67.0 (61.7-71.9) | 26,131 | 73.8 (68.5-78.5) |
| Black, non-Hispanic | 4,094 | 67.9 (62.4-73.0) | 1,860 | 33.0 (27.4-39.1) | 3,826 | 63.8 (58.2-69.1) | 2,599 | 47.1 (41.0-53.3) |
| Hispanic | 9,382 | 72.8 (67.7-77.3) | 3,968 | 32.4 (27.5-37.7) | 9,765 | 76.4 (71.6-80.7) | 5,570 | 45.2 (39.9-50.7) |
| Asian, non-Hispanic | 4,896 | 82.6 (77.5-86.8) | 1,808 | 32.9 (27.7-38.6) | 3,562 | 61.3 (55.5-66.8) | 2,536 | 46.9 (41.0-52.9) |
| Other, non-Hispanic | 229 | 61.4 (36.2-81.7) | 127 | 37.7 (16.6-64.7) | 273 | 76.3 (47.0-92.1) | 208 | 55.6 (31.4-77.3) |
| **Age (years)** | | | | | | | | |
| <20 | 928 | 68.7 (47.7-84.1) | 357 | 26.3 (11.8-48.8) | 1,005 | 74.9 (53.4-88.6) | 490 | 36.1 (18.8-58.0) |
| 20-29 | 15,307 | 76.6 (71.4-81.1) | 7,047 | 36.8 (30.7-43.4) | 14,519 | 73.6 (67.9-78.6) | 10,070 | 52.6 (46.2-59.0) |
| 30-39 | 33,130 | 90.8 (88.6-92.6) | 15,388 | 43.3 (38.8-47.9) | 23,404 | 64.6 (60.1-68.9) | 25,245 | 71.2 (67.1-74.9) |
| 40+ | 3,606 | 87.6 (79.3-92.8) | 1,408 | 36.9 (25.2-50.4) | 2,846 | 69.5 (56.4-80.0) | 1,746 | 46.0 (33.2-59.3) |
| **Education** | | | | | | | | |
| <High school | 3,064 | 67.0 (57.6-75.2) | 1,197 | 28.3 (19.9-38.6) | 3,288 | 74.0 (64.4-81.7) | 1,817 | 41.7 (32.2-51.9) |
| High school diploma | 6,381 | 68.9 (60.3-76.3) | 2,544 | 27.8 (20.3-36.8) | 6,489 | 70.3 (61.3-78.0) | 3,264 | 36.8 (28.2-46.3) |
| Some college | 10,293 | 81.4 (75.5-86.2) | 4,451 | 35.8 (28.3-44.2) | 9,529 | 75.2 (68.3-81.1) | 6,921 | 55.7 (47.8-63.3) |
| College graduate | 32,437 | 94.6 (92.8-95.9) | 15,423 | 46.7 (41.9-51.6) | 21,606 | 63.7 (59.0-68.1) | 24,957 | 75.5 (71.4-79.1) |
| **Insurance type** | | | | | | | | |
| Private | 34,959 | 94.1 (92.0-95.7) | 17,587 | 49.0 (44.3-53.7) | 23,755 | 65.2 (60.6-69.5) | 26,740 | 74.5 (70.4-78.2) |
| Medicaid | 16,026 | 72.6 (67.8-76.9) | 6,084 | 28.6 (23.8-34.1) | 16,203 | 73.4 (68.5-77.8) | 10,043 | 47.7 (42.0-53.5) |
| Other | 664 | 62.0 (41.1-79.3) | 220 | 18.8 (6.6-43.2) | 787 | 62.1 (37.1-81.9) | 425 | 35.9 (17.3-60.0) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 8,581 | 76.6 (70.6-81.6) | 2,839 | 25.8 (19.8-32.9) | 7,762 | .0 | 4,947 | 45.4 (37.7-53.3) |
| >100% FPL | 41,320 | 88.4 (85.9-90.5) | 20,279 | 44.8 (40.7-49.0) | 30,818 | 66.4 (62.4-70.1) | 31,111 | 68.8 (65.0-72.4) |
| **Nativity** | | | | | | | | |
| Non-US-born | 15,961 | 75.4 (71.4-79.0) | 6,091 | 30.7 (26.6-35.2) | 14,790 | 70.5 (66.1-74.6) | 9,906 | 49.9 (45.0-54.8) |
| US-born | 37,010 | 90.8 (88.0-92.9) | 18,109 | 45.2 (40.5-50.0) | 26,984 | 66.8 (62.2-71.0) | 27,645 | 69.3 (64.8-73.4) |
| **Marital status** | | | | | | | | |
| Unmarried | 13,511 | 73.0 (67.4-78.0) | 5,878 | 32.2 (26.3-73.7) | 13,045 | 70.4 (64.4-75.8) | 9,240 | 51.2 (44.7-57.6) |
| Married | 39,460 | 90.8 (88.9-92.4) | 18,321 | 44.0 (39.8-60.2) | 28,729 | 67.0 (63.0-70.8) | 28,311 | 67.9 (63.9-71.6) |
| **WIC participation** | | | | | | | | |
| No | 38,224 | 91.5 (89.3-93.4) | 18,689 | 46.3 (41.9-50.8) | 27,144 | 65.8 (61.5-69.8) | 28,710 | 71.1 (67.1-74.8) |
| Yes | 14,638 | 73.0 (68.0-77.4) | 5,469 | 28.1 (23.0-34.0) | 14,589 | 72.9 (67.5-77.6) | 8,790 | 45.6 (39.6-51.7) |
| **Disability status** | | | | | | | | |
| No | 47,892 | 86.9 (84.7-88.8) | 22,299 | 42.0 (38.3-45.8) | 37,040 | 68.2 (64.7-71.5) | 33,703 | 63.6 (60.0-67.0) |
| Yes | 4,883 | 75.8 (66.3-83.4) | 1,821 | 28.4 (19.4-39.5) | 4,539 | 68.0 (56.7-77.6) | 3,682 | 57.5 (46.2-68.1) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Supine sleep: infant placed to sleep on their back; [4]Separate sleep surface: infant sleeps on a separate approved sleep surface (crib, bassinet, or pack and play); [5]No bed-sharing: infant room-sharing without bed-sharing; [6]No soft objects/loose bedding: infant sleeps without soft objects or loose bedding such as blankets, toys, or crib bumper pads

## Table 50. Prevalence of infant safe sleep behaviors by sociodemographic characteristics, MA PRAMS, 2021

| | Supine sleep[3] | | Separate sleep surface[4] | | No bed-sharing[5] | | No soft objects/ loose bedding[6] | |
|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 55,206 | 85.7 (83.5-87.7) | 26,382 | 42.3 (38.8-45.9) | 44,792 | 69.7 (66.4-72.9) | 42,024 | 67.8 (64.6-70.8) |
| **Race/ethnicity** | | | | | | | | |
| White, non-Hispanic | 35,892 | 93.9 (90.7-96.0) | 18,099 | 48.2 (42.8-53.6) | 26,704 | 69.7 (64.6-74.3) | 29,476 | 78.9 (73.9-83.0) |
| Black, non-Hispanic | 4,371 | 72.5 (66.7-77.6) | 1,837 | 31.3 (26.1-37.0) | 4,215 | 69.4 (63.6-74.6) | 2,899 | 49.9 (43.9-55.9) |
| Hispanic | 9,358 | 69.7 (64.5-74.3) | 4,181 | 33.3 (28.3-38.7) | 9,670 | 73.7 (68.6-78.2) | 6,099 | 48.7 (43.2-54.2) |
| Asian, non-Hispanic | 4,254 | 87.2 (81.6-91.3) | 1,544 | 33.2 (27.4-39.6) | 3,139 | 63.9 (57.5-69.8) | 2,495 | 54.1 (47.5-60.6) |
| Other, non-Hispanic | 215 | 80.1 (45.7-95.1) | 108 | 54.7 (25.1-81.3) | 161 | 60.1 (30.6-83.8) | 143 | 61.6 (31.2-85.0) |
| **Age (years)** | | | | | | | | |
| <20 | 635 | 59.0 (38.3-76.9) | 150 | 14.8 (6.0-31.9) | 504 | 46.8 (28.9-65.6) | 245 | 24.1 (12.0-42.5) |
| 20-29 | 13,931 | 75.2 (69.8-79.9) | 5,953 | 33.8 (27.9-40.3) | 12,458 | 67.8 (61.5-73.5) | 9,529 | 54.3 (47.8-60.6) |
| 30-39 | 38,631 | 91.0 (88.7-92.9) | 18,833 | 45.4 (40.9-49.9) | 29,922 | 70.4 (66.2-74.3) | 30,570 | 74.3 (70.4-77.8) |
| 40+ | 2,008 | 86.7 (70.1-94.8) | 1,446 | 63.3 (47.3-76.9) | 1,908 | 82.9 (69.6-91.2) | 1,680 | 74.1 (58.3-85.5) |
| **Education** | | | | | | | | |
| <High school | 2,904 | 65.0 (55.8-73.1) | 1,176 | 28.8 (19.2-40.7) | 3,240 | 74.1 (65.6-81.1) | 1,704 | 41.7 (31.9-52.0) |
| High school diploma | 6,520 | 69.2 (60.8-76.5) | 3,727 | 41.9 (32.9-51.5) | 6,928 | 73.8 (65.1-81.0) | 3,893 | 45.0 (35.7-54.6) |
| Some college | 11,095 | 86.9 (81.9-90.7) | 4,074 | 33.2 (25.8-41.6) | 8,572 | 67.2 (59.1-74.4) | 7,219 | 59.3 (51.0-67.1) |
| College graduate | 33,832 | 93.1 (90.5-95.0) | 17,136 | 47.8 (43.0-52.6) | 25,367 | 69.7 (65.2-73.8) | 28,350 | 79.3 (75.6-82.6) |
| **Insurance type** | | | | | | | | |
| Private | 35,800 | 93.4 (90.8-95.3) | 18,032 | 48.0 (43.3-52.8) | 25,829 | 67.3 (62.7-71.6) | 29,736 | 79.3 (75.7-82.6) |
| Medicaid | 16,523 | 74.6 (70.1-78.7) | 7,105 | 33.7 (28.2-39.6) | 16,417 | 74.8 (69.7-79.3) | 9,955 | 48.2 (42.3-54.1) |
| Other | 1,319 | 67.9 (46.1-84.0) | 721 | 37.8 (20.4-59.2) | 1,104 | 56.9 (36.3-75.3) | 1,328 | 68.4 (49.3-82.8) |
| **Household poverty level** | | | | | | | | |
| ≤100% FPL | 7,822 | 69.6 (62.8-75.6) | 3,539 | 33.1 (25.9-41.2) | 8,244 | 73.9 (66.8-80.0) | 4,167 | 40.5 (33.0-48.4) |
| >100% FPL | 44,972 | 90.0 (87.6-92.0) | 21,516 | 44.1 (40.0-48.2) | 34,058 | 68.1 (64.2-71.8) | 36,263 | 74.3 (70.8-77.5) |
| **Nativity** | | | | | | | | |
| Non-US-born | 15,683 | 76.8 (72.8-80.4) | 6,754 | 35.9 (31.2-40.8) | 15,381 | 75.5 (71.3-79.3) | 9,559 | 51.1 (46.1-56.1) |
| US-born | 39,523 | 89.9 (87.0-92.2) | 19,629 | 45.1 (40.5-49.8) | 29,410 | 67.0 (62.5-71.2) | 32,466 | 75.0 (70.9-78.7) |
| **Marital status** | | | | | | | | |
| Unmarried | 15,421 | 76.8 (71.7-81.1) | 6,802 | 35.3 (29.0-42.1) | 14,757 | 73.9 (68.0-79.2) | 10,127 | 52.9 (46.3-59.5) |
| Married | 39,785 | 89.8 (87.3-91.9) | 19,580 | 45.4 (41.2-49.7) | 30,034 | 67.8 (63.7-71.6) | 31,898 | 74.4 (70.9-77.7) |
| **WIC participation** | | | | | | | | |
| No | 42,404 | 93.2 (91.0-95.0) | 20,346 | 45.7 (41.4-50.2) | 31,144 | 68.4 (64.2-72.3) | 33,667 | 76.0 (72.4-79.3) |
| Yes | 12,702 | 67.7 (62.3-72.7) | 6,021 | 33.8 (28.2-39.9) | 13,602 | 73.2 (67.7-78.1) | 8,287 | 47.1 (41.0-53.2) |
| **Disability status** | | | | | | | | |
| No | 48,446 | 86.2 (83.7-88.3) | 23,645 | 43.5 (39.7-47.4) | 38,802 | 69.0 (65.4-72.4) | 38,171 | 70.7 (67.4-73.9) |
| Yes | 6,260 | 83.5 (76.8-88.5) | 2,526 | 33.9 (24.8-44.3) | 5,502 | 74.2 (65.1-81.6) | 3,618 | 48.4 (38.5-58.5) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Supine sleep: infant placed to sleep on their back; [4]Separate sleep surface: infant sleeps on a separate approved sleep surface (crib, bassinet, or pack and play); [5]No bed-sharing: infant room-sharing without bed-sharing; [6]No soft objects/loose bedding: infant sleeps without soft objects or loose bedding such as blankets, toys, or crib bumper pads n weighted to reflect birthing population

## Table 51. Prevalence of reporting oral health care and knowledge by type and sociodemographic characteristics, MA PRAMS, 2019

| | Teeth cleaned prior to pregnancy[3] | | Teeth cleaned during pregnancy[4] | | Dental insurance during pregnancy [5] | | Knowledge of importance[6] | | Received counseling[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 35,665 | 53.9 (50.9-57.0) | 38,890 | 58.8 (55.7-61.7) | 57,860 | 89.5 (87.7-91.1) | 59,171 | 89.9 (88.1-91.5) | 37,743 | 57.9 (54.8-61.0) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 24,881 | 62.9 (58.2-67.4) | 25,447 | 64.3 (59.6-68.7) | 35,696 | 91.8 (88.9-94.0) | 36,988 | 93.8 (91.1-95.8) | 24,051 | 61.5 (56.7-66.0) |
| Black, non-Hispanic | 2,489 | 37.8 (32.3-43.6) | 2,943 | 45.3 (39.8-51.0) | 5,436 | 86.8 (82.7-90.0) | 5,324 | 82.6 (77.4-86.8) | 3,108 | 49.1 (43.4-54.8) |
| Hispanic | 5,213 | 40.6 (35.9-45.5) | 6,675 | 51.6 (46.7-56.4) | 11,062 | 88.1 (84.6-90.9) | 10,752 | 83.6 (79.6-87.0) | 6,805 | 53.6 (48.6-58.4) |
| Asian, non-Hispanic | 2,512 | 43.7 (38.3-49.2) | 2,895 | 50.2 (44.7-55.8) | 4,659 | 83.6 (78.9-87.4) | 4,796 | 84.5 (79.9-88.2) | 2,995 | 53.6 (47.9-59.1) |
| Other, non-Hispanic | 195 | 31.1 (17.1-49.8) | 407 | 64.8 (46.2-79.9) | 408 | 70.7 (50.7-85.0) | 525 | 83.7 (66.3-93.1) | 372 | 61.8 (43.1-77.6) |
| **Age (years)** | | | | | | | | | | |
| <20 | 441 | 42.3 (24.3-62.7) | 487 | 46.8 (28.3-66.2) | 860 | 82.6 (58.3-94.2) | 845 | 81.1 (62.2-91.8) | 577 | 55.5 (34.9-74.3) |
| 20-29 | 8,086 | 38.3 (33.3-43.5) | 9,653 | 45.7 (40.6-50.8) | 17,899 | 87.1 (83.3-90.1) | 18,177 | 86.9 (83.3-89.8) | 10,856 | 52.5 (47.3-57.7) |
| 30-39 | 25,152 | 62.2 (58.2-66.0) | 26,633 | 65.8 (61.9-69.5) | 35,992 | 91.0 (88.7-92.9) | 36,955 | 91.6 (89.3-93.4) | 24,033 | 60.1 (56.0-64.1) |
| 40+ | 1,986 | 57.1 (43.6-69.7) | 2,117 | 59.8 (46.1-72.2) | 3,110 | 89.4 (80.6-94.5) | 3,194 | 91.6 (82.9-96.1) | 2,277 | 65.6 (51.8-77.1) |
| **Education** | | | | | | | | | | |
| <High school | 1,410 | 28.4 (20.9-37.4) | 1,789 | 36.2 (28.2-45.0) | 4,206 | 87.2 (80.2-92.0) | 3,727 | 75.8 (67.5-82.5) | 2,229 | 46.2 (37.2-55.4) |
| High school diploma | 2,864 | 30.0 (24.1-36.7) | 4,718 | 48.7 (41.5-56.1) | 8,105 | 88.7 (84.0-92.2) | 8,320 | 87.5 (82.3-91.3) | 4,764 | 51.5 (44.0-58.9) |
| Some college | 6,884 | 43.6 (37.5-49.8) | 7,327 | 46.3 (40.2-52.5) | 13,667 | 88.9 (85.1-91.9) | 13,815 | 87.5 (82.8-91.0) | 7,895 | 50.4 (44.1-56.6) |
| College graduate | 23,476 | 69.1 (64.9-73.0) | 23,801 | 70.2 (66.0-74.0) | 30,369 | 90.7 (87.8-92.9) | 31,606 | 93.6 (91.3-95.3) | 21,674 | 64.5 (60.0-68.8) |
| **Insurance type** | | | | | | | | | | |
| Private | 26,760 | 67.7 (63.7-71.5) | 27,163 | 68.8 (64.8-72.5) | 36,273 | 92.8 (90.5-94.5) | 36,910 | 93.7 (91.7-95.3) | 24,821 | 63.7 (59.5-67.7) |
| Medicaid | 7,809 | 33.8 (29.6-38.3) | 9,987 | 43.1 (38.6-47.7) | 19,275 | 87.6 (84.3-90.3) | 19,425 | 84.8 (81.2-87.8) | 11,140 | 49.1 (44.4-53.8) |
| Other | 480 | 26.9 (14.3-44.8) | 944 | 52.9 (35.9-69.2) | 1,051 | 58.9 (41.0-74.7) | 1,513 | 84.8 (66.3-94.0) | 907 | 51.3 (34.2-68.1) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 4,070 | 31.5 (26.3-37.2) | 5,861 | 44.6 (38.7-50.6) | 10,800 | 85.1 (80.4-88.8) | 10,658 | 81.2 (76.0-85.5) | 6,797 | 52.3 (46.1-58.3) |
| >100% FPL | 30,668 | 61.1 (57.5-64.6) | 31,628 | 62.9 (59.4-66.4) | 44,787 | 90.9 (88.7-92.7) | 46,320 | 92.7 (90.9-94.2) | 29,725 | 60.1 (56.4-63.7) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 7,526 | 39.3 (35.1-43.7) | 9,259 | 48.4 (44.1-52.7) | 15,075 | 82.4 (79.1-85.3) | 15,751 | 82.7 (79.3-85.7) | 9,708 | 52.0 (47.6-56.3) |
| US-born | 28,139 | 60.0 (56.0-63.8) | 29,630 | 63.0 (59.1-66.8) | 42,786 | 92.4 (90.0-94.2) | 43,395 | 92.8 (90.7-94.5) | 28,035 | 60.4 (56.3-64.2) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 8,485 | 40.2 (35.2-45.4) | 10,106 | 47.7 (42.6-52.9) | 18,268 | 89.0 (85.2-91.9) | 17,896 | 85.3 (81.4-88.5) | 10,776 | 51.7 (46.4-56.9) |
| Married | 27,180 | 60.4 (56.7-64.0) | 28,784 | 64.0 (60.3-67.5) | 39,592 | 89.8 (87.6-91.6) | 41,275 | 92.1 (90.1-93.7) | 26,967 | 60.9 (57.0-64.6) |
| **WIC participation** | | | | | | | | | | |
| No | 28,180 | 62.4 (58.6-66.1) | 29,073 | 64.2 (60.4-67.8) | 40,708 | 90.8 (88.6-92.7) | 41,914 | 92.9 (90.9-94.5) | 27,399 | 61.2 (57.2-64.9) |
| Yes | 7,184 | 35.6 (31.1-40.3) | 9,701 | 47.2 (42.4-52.0) | 16,973 | 86.7 (83.0-89.6) | 17,060 | 83.4 (79.5-86.7) | 10,165 | 50.4 (45.5-55.3) |
| **Disability status** | | | | | | | | | | |
| No | 31,659 | 56.5 (53.0-60.0) | 34,968 | 59.5 (56.3-62.6) | 51,609 | 89.9 (88.0-91.6) | 53,082 | 90.7 (88.9-92.3) | 34,026 | 58.7 (55.4-61.9) |
| Yes | 3,283 | 48.5 (37.8-59.3) | 3,694 | 54.1 (44.8-63.1) | 5,794 | 86.2 (78.2-91.5) | 5,707 | 84.1 (76.6-89.6) | 3,455 | 51.7 (42.3-61.0) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Teeth cleaned prior to pregnancy=teeth cleaned in the 12 months before pregnancy; [4]Teeth cleaned during pregnancy=teeth cleaned during pregnancy; [5]Dental insurance during pregnancy =had dental insurance during pregnancy; [6]Knowledge of importance=knowledge of the importance of teeth and gum care during pregnancy; [7]Received counseling=receiving counseling on the importance of teeth care during pregnancy

## Table 52. Prevalence of reporting oral health care and knowledge by type and sociodemographic characteristics, MA PRAMS, 2020

| | Teeth cleaned prior to pregnancy[3] | | Teeth cleaned during pregnancy[4] | | Dental insurance during pregnancy [5] | | Knowledge of importance[6] | | Received counseling[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 35,457 | 55.5 (52.2-58.7) | 32,608 | 51.1 (47.7-54.5) | 54,146 | 87.1 (84.7-89.2) | 56,064 | 88.5 (86.2-90.4) | 33,754 | 53.9 (50.5-57.4) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 24,806 | 67.4 (62.1-72.3) | 20,930 | 56.9 (51.4-62.1) | 32,369 | 89.9 (86.0-92.8) | 33,479 | 91.5 (87.7-94.1) | 20,449 | 56.5 (51.0-61.8) |
| Black, non-Hispanic | 2,334 | 36.9 (31.3-42.9) | 2,520 | 39.8 (34.3-45.5) | 4,892 | 80.4 (74.9-85.0) | 5,180 | 83.0 (78.5-86.7) | 3,072 | 49.9 (44.2-55.7) |
| Hispanic | 5,325 | 39.3 (34.3-44.5) | 6,091 | 45.4 (40.2-50.7) | 11,169 | 85.3 (80.9-88.8) | 11,041 | 82.9 (78.5-86.6) | 6,406 | 48.6 (43.3-53.9) |
| Asian, non-Hispanic | 2,413 | 40.8 (35.3-46.5) | 2,315 | 38.6 (33.2-44.3) | 4,497 | 79.0 (73.7-83.4) | 5,161 | 87.2 (82.7-90.7) | 3,102 | 53.8 (47.9-59.5) |
| Other, non-Hispanic | 148 | 36.4 (17.3-61.1) | 186 | 45.7 (24.2-68.9) | 350 | 86.0 (58.3-96.5) | 336 | 82.5 (56.9-94.4) | 159 | 39.0 (19.3-63.1) |
| **Age (years)** | | | | | | | | | | |
| <20 | 198 | 13.7 (4.2-36.5) | 265 | 18.3 (7.5-38.2) | 1,230 | 84.9 (64.2-94.7) | 867 | 59.9 (38.7-77.9) | 494 | 34.1 (17.8-55.2) |
| 20-29 | 9,995 | 48.0 (41.9-54.0) | 9,832 | 47.3 (41.2-53.4) | 17,683 | 87.5 (83.7-90.6) | 17,613 | 85.6 (81.2-89.1) | 10,478 | 51.4 (45.2-57.5) |
| 30-39 | 22,681 | 60.6 (56.3-64.7) | 20,408 | 54.6 (50.1-58.9) | 31,668 | 86.6 (83.2-89.4) | 33,650 | 90.5 (87.6-92.8) | 20,644 | 56.2 (51.6-60.6) |
| 40+ | 2,583 | 62.0 (49.4-73.2) | 2,104 | 50.5 (38.0-63.0) | 3,565 | 90.5 (80.0-95.8) | 3,935 | 94.5 (86.4-97.9) | 2,139 | 53.7 (40.7-66.3) |
| **Education** | | | | | | | | | | |
| <High school | 1,213 | 24.5 (17.5-33.1) | 1,615 | 32.8 (24.5-42.4) | 3,896 | 82.0 (73.4-88.2) | 3,604 | 73.7 (62.6-82.4) | 2,035 | 41.5 (32.3-51.3) |
| High school diploma | 3,575 | 36.2 (27.8-45.4) | 3,706 | 37.9 (29.9-46.6) | 7,950 | 82.6 (75.3-88.0) | 7,761 | 80.3 (72.2-86.4) | 4,438 | 45.9 (37.2-54.9) |
| Some college | 7,005 | 53.5 (45.9-60.9) | 6,905 | 52.8 (45.1-60.3) | 11,004 | 88.0 (82.0-92.2) | 11,558 | 89.1 (83.9-92.8) | 7,205 | 57.3 (49.4-64.9) |
| College graduate | 23,121 | 66.7 (62.4-70.9) | 19,944 | 57.4 (52.8-62.0) | 30,263 | 89.0 (85.8-91.6) | 32,015 | 92.6 (90.0-94.6) | 19,630 | 57.4 (52.7-62.0) |
| **Insurance type** | | | | | | | | | | |
| Private | 25,584 | 68.4 (64.1-72.4) | 22,000 | 58.8 (54.2-63.2) | 33,513 | 91.3 (88.6-93.4) | 34,894 | 93.8 (91.4-95.5) | 22,156 | 60.0 (55.4-64.4) |
| Medicaid | 8,902 | 38.6 (33.2-44.3) | 9,496 | 41.3 (36.0-46.8) | 18,440 | 83.2 (78.7-86.9) | 19,040 | 83.6 (79.4-87.1) | 10,724 | 48.0 (42.5-53.6) |
| Other | 500 | 38.0 (18.4-62.5) | 348 | 27.1 (13.0-48.1) | 730 | 58.5 (35.4-78.4) | 633 | 49.3 (28.1-70.8) | 357 | 28.6 (15.1-47.3) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 4,090 | 34.7 (27.6-42.6) | 4,619 | 39.0 (32.0-46.6) | 8,664 | 76.7 (69.9-82.4) | 9,362 | 80.6 (74.2-85.7) | 5,139 | 44.7 (37.4-52.2) |
| >100% FPL | 29,304 | 61.8 (57.9-65.6) | 25,900 | 54.6 (50.5-58.6) | 41,849 | 90.1 (87.5-92.2) | 43,198 | 91.4 (88.9-93.4) | 26,571 | 57.0 (52.9-61.1) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 8,388 | 38.2 (33.7-42.8) | 9,248 | 42.0 (37.5-46.7) | 16,448 | 78.2 (73.8-81.9) | 18,195 | 83.6 (80.1-86.6) | 10,308 | 48.4 (43.7-53.1) |
| US-born | 27,069 | 64.6 (60.1-68.8) | 23,360 | 55.9 (51.2-60.4) | 37,698 | 91.7 (88.8-94.0) | 37,869 | 91.0 (87.9-93.4) | 23,446 | 56.8 (52.1-61.4) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 8,578 | 43.5 (37.4-49.9) | 7,801 | 39.7 (33.8-46.0) | 16,666 | 86.4 (81.8-90.0) | 16,125 | 82.9 (77.8-86.9) | 9,156 | 47.0 (40.9-53.3) |
| Married | 26,879 | 60.8 (56.9-64.6) | 24,807 | 56.1 (52.1-60.1) | 37,480 | 87.5 (84.6-89.9) | 39,940 | 91.0 (88.5-93.0) | 24,598 | 57.1 (52.9-61.1) |
| **WIC participation** | | | | | | | | | | |
| No | 26,806 | 62.7 (58.5-66.7) | 22,812 | 53.3 (49.0-57.6) | 37,434 | 89.8 (87.2-91.9) | 38,845 | 91.3 (88.5-93.5) | 23,392 | 55.9 (51.5-60.1) |
| Yes | 8,545 | 41.2 (35.5-47.2) | 9,754 | 46.7 (41.1-52.5) | 16,542 | 81.6 (76.5-85.9) | 17,101 | 82.7 (78.4-86.3) | 10,332 | 50.3 (44.6-56.0) |
| **Disability status** | | | | | | | | | | |
| No | 31,979 | 54.6 (51.3-57.8) | 29,426 | 52.4 (48.8-56.0) | 47,871 | 87.7 (85.2-89.8) | 49,916 | 89.4 (87.2-91.3) | 30,009 | 54.6 (50.9-58.3) |
| Yes | 3,467 | 51.6 (42.3-60.7) | 2,754 | 40.7 (30.5-51.7) | 5,563 | 83.7 (74.4-90.0) | 5,381 | 80.8 (70.0-88.4) | 3,192 | 47.3 (36.7-58.3) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Teeth cleaned prior to pregnancy=teeth cleaned in the 12 months before pregnancy; [4]Teeth cleaned during pregnancy=teeth cleaned during pregnancy; [5]Dental insurance during pregnancy =had dental insurance during pregnancy; [6]Knowledge of importance=knowledge of the importance of teeth and gum care during pregnancy; [7]Received counseling=receiving counseling on the importance of teeth care during pregnancy n weighted to reflect birthing population

| Table 53. Prevalence of reporting oral health care and knowledge by type and sociodemographic characteristics, MA PRAMS, 2021 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Teeth cleaned prior to pregnancy[3] | | Teeth cleaned during pregnancy[4] | | Dental insurance during pregnancy [5] | | Knowledge of importance[6] | | Received counseling[7] | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 33,588 | 50.5 (47.1-53.9) | 34,984 | 52.7 (49.3-56.1) | 57,753 | 88.7 (86.5-90.6) | 58,985 | 88.9 (86.8-90.7) | 34,207 | 52.2 (48.7-55.6) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 23,425 | 59.3 (54.0-64.4) | 23,114 | 58.7 (53.4-63.8) | 35,444 | 91.2 (87.7-93.7) | 36,422 | 92.2 (88.8-94.6) | 21,159 | 54.2 (48.9-59.4) |
| Black, non-Hispanic | 2,383 | 36.6 (31.0-42.6) | 2,499 | 38.7 (32.9-44.7) | 5,330 | 85.0 (80.4-88.7) | 5,372 | 83.6 (78.8-87.5) | 3,115 | 49.5 (43.5-55.6) |
| Hispanic | 4,408 | 32.6 (27.8-37.7) | 5,820 | 42.8 (37.7-48.1) | 11,165 | 84.9 (80.6-88.3) | 11,110 | 82.2 (77.7-85.9) | 6,201 | 46.1 (40.9-51.4) |
| Asian, non-Hispanic | 2,081 | 41.3 (35.2-47.6) | 2,205 | 43.7 (37.5-50.1) | 4,108 | 83.3 (77.9-87.6) | 4,233 | 84.6 (79.6-88.5) | 2,278 | 46.2 (39.9-52.6) |
| Other, non-Hispanic | 142 | 42.0 (19.1-69.0) | 178 | 52.6 (27.3-76.6) | 268 | 88.2 (62.7-97.1) | 303 | 89.4 (65.8-97.4) | 125 | 41.1 (18.0-68.9) |
| **Age (years)** | | | | | | | | | | |
| <20 | 417 | 38.8 (21.1-60.0) | 415 | 37.5 (20.3-58.6) | 957 | 94.1 (79.2-98.5) | 876 | 81.3 (63.7-91.5) | 564 | 52.4 (33.7-70.5) |
| 20-29 | 7,616 | 40.1 (34.2-46.4) | 8,657 | 45.7 (39.6-51.9) | 15,990 | 85.9 (81.2-89.6) | 15,870 | 83.8 (79.2-87.6) | 9,087 | 48.4 (42.2-54.7) |
| 30-39 | 24,390 | 55.4 (51.1-59.7) | 24,663 | 56.1 (51.7-60.4) | 39,082 | 90.6 (88.0-92.7) | 40,088 | 91.3 (88.7-93.3) | 23,447 | 54.1 (49.6-58.4) |
| 40+ | 1,165 | 47.8 (31.8-64.3) | 1,249 | 53.5 (36.8-69.4) | 1,724 | 74.4 (56.5-86.6) | 2,151 | 89.6 (76.7-95.8) | 1,109 | 47.4 (31.2-64.2) |
| **Education** | | | | | | | | | | |
| <High school | 1,249 | 26.6 (18.1-37.2) | 1,871 | 40.1 (31.0-49.9) | 3,938 | 89.7 (83.2-93.9) | 3,497 | 76.4 (67.3-83.7) | 1,900 | 42.5 (33.3-52.4) |
| High school diploma | 3,124 | 31.9 (24.0-41.0) | 3,970 | 40.8 (32.2-49.9) | 8,030 | 85.4 (78.8-90.1) | 8,310 | 84.8 (77.5-90.0) | 4,102 | 42.7 (34.4-51.5) |
| Some college | 5,492 | 42.1 (34.4-50.3) | 5,705 | 43.7 (36.0-51.7) | 11,401 | 90.0 (83.9-94.0) | 11,595 | 88.9 (83.9-92.5) | 6,006 | 46.4 (38.4-54.5) |
| College graduate | 22,954 | 61.1 (56.5-65.5) | 22,653 | 60.5 (55.9-64.8) | 33,244 | 89.2 (86.2-91.7) | 34,342 | 91.5 (88.7-93.7) | 21,222 | 57.1 (52.4-61.7) |
| **Insurance type** | | | | | | | | | | |
| Private | 24,539 | 62.3 (57.7-66.6) | 24,396 | 61.9 (57.4-66.2) | 35,393 | 90.9 (88.1-93.1) | 36,429 | 92.4 (89.9-94.4) | 21,957 | 56.5 (51.9-61.1) |
| Medicaid | 7,804 | 33.9 (28.6-39.5) | 8,809 | 38.4 (33.2-43.8) | 19,572 | 87.6 (83.7-90.6) | 18,935 | 82.9 (78.7-86.5) | 10,368 | 45.6 (40.2-51.2) |
| Other | 641 | 33.0 (16.3-55.5) | 788 | 40.6 (22.6-61.5) | 1,076 | 60.4 (40.2-77.7) | 1,777 | 91.5 (74.2-97.6) | 839 | 44.4 (25.3-65.3) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 4,162 | 35.6 (28.6-43.3) | 4,387 | 37.8 (31.0-45.2) | 9,897 | 87.0 (81.6-90.9) | 9,651 | 82.9 (77.1-87.4) | 5,140 | 44.4 (37.1-52.0) |
| >100% FPL | 28,445 | 55.6 (51.5-59.5) | 29,425 | 57.4 (53.4-61.3) | 45,114 | 89.5 (86.8-91.6) | 46,617 | 91.1 (88.8-93.0) | 27,530 | 54.5 (50.4-58.5) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 5,812 | 27.6 (23.7-31.9) | 8,731 | 41.5 (36.8-46.3) | 16,037 | 79.6 (75.5-83.2) | 17,142 | 81.8 (77.9-85.1) | 9,125 | 44.3 (39.6-49.1) |
| US-born | 27,776 | 61.2 (56.7-65.5) | 26,253 | 57.9 (53.3-62.4) | 41,716 | 92.8 (90.0-94.9) | 41,843 | 92.2 (89.5-94.3) | 25,081 | 55.8 (51.1-60.3) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 8,528 | 40.9 (34.6-47.4) | 8,513 | 40.8 (34.7-47.3) | 18,172 | 88.2 (83.5-91.7) | 17,668 | 84.7 (79.8-88.6) | 8,897 | 42.8 (36.7-49.2) |
| Married | 25,060 | 54.9 (50.9-58.9) | 26,471 | 58.1 (54.2-62.0) | 39,582 | 89.0 (86.4-91.1) | 41,316 | 90.8 (88.6-92.7) | 25,310 | 56.5 (52.4-60.5) |
| **WIC participation** | | | | | | | | | | |
| No | 27,305 | 58.2 (54.0-62.3) | 27,157 | 58.0 (53.8-62.1) | 41,412 | 89.8 (87.1-91.9) | 42,625 | 90.9 (88.3-92.9) | 25,230 | 54.4 (50.1-58.7) |
| Yes | 6,193 | 32.0 (26.6-37.9) | 7,707 | 39.9 (34.3-45.8) | 16,251 | 86.3 (81.8-89.7) | 16,187 | 84.0 (79.7-87.6) | 8,856 | 46.5 (40.6-52.4) |
| **Disability status** | | | | | | | | | | |
| No | 30,255 | 52.3 (48.7-56.0) | 31,787 | 55.0 (51.3-58.6) | 50,957 | 89.8 (87.5-91.8) | 51,970 | 89.9 (87.7-91.7) | 30,503 | 53.4 (49.6-57.1) |
| Yes | 3,184 | 41.5 (32.1-51.7) | 2,795 | 36.6 (27.8-46.4) | 6,121 | 81.7 (73.2-88.0) | 6,183 | 82.0 (73.2-88.3) | 3,076 | 41.3 (32.0-51.2) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Teeth cleaned prior to pregnancy=teeth cleaned in the 12 months before pregnancy; [4]Teeth cleaned during pregnancy=teeth cleaned during pregnancy; [5]Dental insurance during pregnancy =had dental insurance during pregnancy; [6]Knowledge of importance=knowledge of the importance of teeth and gum care during pregnancy; [7]Received counseling=receiving counseling on the importance of teeth care during pregnancy n weighted to reflect birthing population

## Table 54. Prevalence of reasons for not going to the dentist during pregnancy, MA PRAMS, 2019-2021

| | 2019 | | 2020 | | 2021 | |
|---|---|---|---|---|---|---|
| **Reasons for not going to the dentist during pregnancy** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| I could not find a dentist or dental clinic that would take pregnant patients | 2,454 | 3.8 (2.9-5.0) | 2,634 | 4.3 (3.1-6.0) | 2,876 | 4.4 (3.3-5.9) |
| I could not find a dentist or dental clinic that would take MassHealth patients | 3,189 | 5.0 (3.8-6.4) | 3,558 | 5.8 (4.4-7.6) | 3,735 | 5.8 (4.5-7.4) |
| I did not think it was safe to go to the dentist during pregnancy | 8,255 | 12.7 (11.0-14.6) | 11,998 | 19.3 (16.8-21.9) | 11,217 | 17.2 (15.0-19.8) |
| I could not afford to go to the dentist or dental clinic | 5,852 | 9.0 (7.5-10.9) | 4,518 | 7.4 (6.0-9.1) | 5,560 | 8.6 (6.9-10.7) |

[1]n weighted to reflect birthing population;

## Table 55. Prevalence of enrollment in WIC during pregnancy by sociodemographic characteristics, MA PRAMS, 2019-2021

| | WIC during pregnancy | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 20,592 | 31.2 (28.8-33.8) | 20,876 | 32.8 (29.9-35.8) | 19,453 | 29.3 (26.6-32.1) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 6,494 | 16.4 (13.2-20.3) | 6,616 | 18.0 (13.8-23.1) | 6,148 | 15.6 (11.9-20.2) |
| Black, non-Hispanic | 3,647 | 57.0 (51.3-62.5) | 3,927 | 62.7 (57.3-67.9) | 3,614 | 55.5 (49.6-61.3) |
| Hispanic | 8,510 | 66.2 (61.6-70.5) | 8,816 | 66.0 (60.9-70.8) | 8,442 | 62.3 (57.1-67.2) |
| Asian, non-Hispanic | 1,315 | 23.0 (18.2-28.5) | 1,000 | 16.6 (12.5-21.8) | 856 | 17.2 (12.4-23.2) |
| Other, non-Hispanic | 439 | 70.0 (52.1-83.3) | 288 | 70.8 (47.3-86.7) | 232 | 68.3 (41.1-87.0) |
| **Age (years)** | | | | | | |
| <20 | 853 | 82.0 (63.6-92.2) | 1,253 | 90.3 (72.9-97.0) | 933 | 89.1 (73.7-96.0) |
| 20-29 | 10,390 | 49.5 (44.4-54.6) | 10,593 | 50.9 (45.0-56.9) | 9,851 | 51.8 (45.7-57.9) |
| 30-39 | 8,583 | 21.3 (18.5-24.3) | 7,582 | 20.3 (17.1-23.9) | 8,172 | 18.6 (15.6-22.0) |
| 40+ | 765 | 21.8 (14.1-32.2) | 1,449 | 34.8 (24.2-47.1) | 496 | 20.7 (11.5-34.3) |
| **Education** | | | | | | |
| <High school | 4,239 | 86.6 (80.6-91.0) | 3,930 | 80.9 (69.8-88.6) | 3,520 | 75.9 (64.7-84.5) |
| High school diploma | 6,554 | 68.5 (60.8-75.2) | 6,192 | 63.3 (54.0-71.8) | 5,897 | 60.0 (50.5-68.7) |
| Some college | 6,829 | 43.2 (37.3-49.3) | 6,477 | 49.7 (42.0-57.3) | 6,716 | 51.5 (43.5-59.4) |
| College graduate | 2,597 | 7.7 (5.9-10.0) | 3,466 | 10.0 (7.5-13.2) | 2,719 | 7.2 (5.3-9.9) |
| **Insurance type** | | | | | | |
| Private | 1,807 | 4.6 (3.3-6.3) | 2,182 | 5.8 (4.1-8.1) | 1,640 | 4.2 (2.7-6.4) |
| Medicaid | 17,348 | 75.3 (70.8-79.3) | 17,002 | 74.0 (68.8-78.7) | 16,614 | 72.2 (66.7-77.1) |
| Other | 691 | 38.7 (23.6-56.3) | 573 | 44.6 (24.5-66.6) | 536 | 27.9 (14.9-46.0) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 10,812 | 82.2 (77.2-86.3) | 9,194 | 78.2 (71.5-83.7) | 8,851 | 76 (68.5-82.1) |
| >100% FPL | 8,173 | 16.3 (14.1-18.8) | 8,525 | 17.9 (15.2-21.0) | 8,464 | 16.5 (13.9-19.5) |
| **Nativity** | | | | | | |
| Non-US-born | 9,256 | 48.7 (44.5-52.9) | 10,683 | 48.7 (44.3-53.2) | 9,622 | 45.8 (41.3-50.3) |
| US-born | 11,311 | 24.1 (21.1-27.4) | 10,193 | 24.4 (20.7-28.5) | 9,831 | 21.7 (18.2-25.5) |
| **Marital status** | | | | | | |
| Unmarried | 13,386 | 63.6 (58.4-68.6) | 12,614 | 64.4 (58.0-70.2) | 12,859 | 61.6 (55.0-67.8) |
| Married | 7,206 | 16.0 (14.0-18.4) | 8,262 | 18.7 (16.0-21.8) | 6,594 | 14.5 (12.4-16.9) |
| **Disability status** | | | | | | |
| No | 16,760 | 28.6 (26.1-31.2) | 16,790 | 29.9 (26.9-33.1) | 14,902 | 25.8 (23.0-28.7) |
| Yes | 3,685 | 54.1 (44.7-63.2) | 3,515 | 51.9 (41.1-62.6) | 3,886 | 50.7 (40.9-60.5) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 56. Prevalence of unintended pregnancy and of being unsure about becoming pregnant by sociodemographic characteristics, MA PRAMS, 2019-2021

| | 2019 | | | | 2020 | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unintended pregnancy[3] | | Unsure of how felt about pregnancy[4] | | Unintended pregnancy[3] | | Unsure of how felt about pregnancy[4] | | Unintended pregnancy[3] | | Unsure of how felt about pregnancy[4] | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 13,844 | 20.9 (18.6-23.5) | 8,059 | 12.2 (10.4-14.2) | 10,769 | 17.0 (14.7-19.6) | 8,049 | 12.7 (10.6-15.2) | 11,412 | 17.2 (14.9-19.9) | 7,555 | 11.4 (9.3-13.9) |
| **Race/ethnicity** | | | | | | | | | | | | |
| White, non-Hispanic | 6,874 | 17.4 (14.0-21.3) | 3,811 | 9.6 (7.2-12.8) | 4,447 | 12.2 (8.9-16.4) | 4,167 | 11.4 (8.3-15.6) | 4,667 | 11.9 (8.7-16.0) | 4,393 | 11.2 (8.2-15.1) |
| Black, non-Hispanic | 2,243 | 33.9 (28.4-39.9) | 1,278 | 19.3 (15.2-24.3) | 1,493 | 24.0 (19.7-28.9) | 1,343 | 21.6 (17.0-27.1) | 1,977 | 30.4 (25.2-36.2) | 1,017 | 15.6 (11.7-20.5) |
| Hispanic | 3,333 | 26.0 (21.9-30.6) | 2,273 | 17.7 (14.3-21.9) | 3,729 | 27.9 (23.2-33.0) | 1,742 | 13.0 (9.9-16.9) | 3,650 | 26.9 (22.5-31.9) | 1,535 | 11.3 (8.2-15.4) |
| Asian, non-Hispanic | 880 | 15.2 (11.6-19.7) | 511 | 8.8 (6.1-12.7) | 1,013 | 16.9 (12.9-21.8) | 654 | 10.9 (7.7-15.2) | 556 | 11.2 (7.8-15.8) | 555 | 11.1 (7.6-16.0) |
| Other, non-Hispanic | 178 | 30.5 (16.1-50.0) | 110 | 18.9 (8.1-37.9) | Insufficient data[2] | | Insufficient data[2] | | 143 | 47 (22.3-73.3) | Insufficient data[2] | |
| **Age (years)** | | | | | | | | | | | | |
| <20 | 559 | 56.1 (35.5-74.7) | 262 | 26.3 (11.6-49.2) | 910 | 64.5 (42.8-81.5) | 357 | 25.3 (10.9-48.3) | 530 | 49.2 (30.7-68.0) | Insufficient data[2] | |
| 20-29 | 6,351 | 30.1 (25.6-35.0) | 2,999 | 14.2 (11.2-17.8) | 5,115 | 24.7 (19.8-30.4) | 3,791 | 18.3 (13.9-23.7) | 5,269 | 27.8 (22.6-33.6) | 2,924 | 15.4 (11.3-20.7) |
| 30-39 | 6,391 | 15.8 (13.0-19.0) | 4,299 | 10.6 (8.4-13.3) | 4,278 | 11.5 (9.2-14.3) | 3,362 | 9.0 (6.8-11.9) | 5,208 | 11.9 (9.4-14.9) | 4,171 | 9.5 (7.2-12.5) |
| 40+ | 543 | 15.7 (8.3-27.8) | 499 | 14.4 (7.3-26.4) | 465 | 11.5 (5.4-22.9) | 540 | 13.4 (6.9-24.4) | 405 | 16.6 (6.7-35.7) | 323 | 13.2 (5.4-29.0) |
| **Education** | | | | | | | | | | | | |
| <High school | 1,499 | 30.6 (22.5-39.9) | 816 | 16.6 (10.7-24.9) | 1,542 | 31.5 (23.0-41.5) | 1,086 | 22.2 (13.9-33.4) | 1,862 | 40.1 (30.6-50.4) | 503 | 10.8 (5.7-19.7) |
| High school diploma | 3,530 | 36.2 (29.4-43.7) | 1,795 | 18.4 (13.5-24.7) | 3,463 | 35.4 (27.1-44.8) | 1,822 | 18.6 (13.0-26.0) | 2,656 | 27.3 (20.3-35.6) | 2,039 | 21.0 (14.3-29.6) |
| Some college | 4,022 | 25.6 (20.6-31.3) | 2,595 | 16.5 (12.6-21.4) | 2,349 | 18.4 (13.6-24.3) | 2,550 | 19.9 (14.0-27.6) | 3,010 | 23.0 (16.8-30.7) | 2,160 | 16.5 (11.5-23.2) |
| College graduate | 4,332 | 12.8 (10.0-16.1) | 2,634 | 7.8 (5.7-10.5) | 3,329 | 9.6 (7.3-12.5) | 2,439 | 7.0 (5.1-9.6) | 3,554 | 9.5 (7.2-12.5) | 2,817 | 7.5 (5.3-10.5) |
| **Insurance type** | | | | | | | | | | | | |
| Private | 5,049 | 12.8 (10.1-16.0) | 3,398 | 8.6 (6.5-11.3) | 4,099 | 11.0 (8.4-14.2) | 2,444 | 6.5 (4.7-9.1) | 3,285 | 8.4 (6.3-11.0) | 2,872 | 7.3 (5.2-10.2) |
| Medicaid | 7,764 | 33.5 (29.2-38.1) | 4,169 | 18.0 (14.8-21.6) | 5,785 | 25.3 (21.1-30.1) | 4,969 | 21.8 (17.4-26.8) | 6,867 | 29.9 (25.0-35.3) | 4,326 | 18.8 (14.7-23.8) |
| Other | 505 | 30.2 (16.1-49.3) | 241 | 14.4 (5.2-33.9) | 497 | 37.9 (18.3-62.3) | 226 | 17.2 (6.4-38.5) | 422 | 21.7 (9.0-43.8) | Insufficient data[2] | |
| **Household poverty level** | | | | | | | | | | | | |
| ≤100% FPL | 4,901 | 38.0 (32.1-44.2) | 2,714 | 21.0 (16.4-26.5) | 3,877 | 33.1 (26.3-40.8) | 2,450 | 20.9 (15.6-27.5) | 3,612 | 31.1 (24.5-38.5) | 2,374 | 20.4 (14.9-27.3) |
| >100% FPL | 8,097 | 16.1 (13.6-19.0) | 4,711 | 9.4 (7.5-11.7) | 5,728 | 12.2 (9.9-14.9) | 4,892 | 10.4 (8.1-13.2) | 6,950 | 13.6 (11.1-16.6) | 4,662 | 9.1 (7.0-11.9) |
| **Nativity** | | | | | | | | | | | | |
| Non-US-born | 4,123 | 21.5 (18.2-25.3) | 2,280 | 11.9 (9.5-14.7) | 4,173 | 19.1 (15.9-22.8) | 2,626 | 12.0 (9.3-15.3) | 5,233 | 24.9 (21.0-29.3) | 2,233 | 10.6 (7.8-14.3) |
| US-born | 9,695 | 20.7 (17.7-24.0) | 5,779 | 12.3 (10.0-15.0) | 6,596 | 15.9 (12.8-19.5) | 5,423 | 13.1 (10.2-16.6) | 6,178 | 13.7 (10.8-17.1) | 5,322 | 11.8 (9.1-15.1) |
| **Marital status** | | | | | | | | | | | | |
| Unmarried | 7,179 | 34.3 (29.4-39.5) | 4,560 | 21.8 (17.9-26.2) | 6,270 | 32.3 (26.7-38.4) | 4,557 | 23.4 (18.6-29.1) | 6,365 | 30.4 (24.9-36.6) | 4,175 | 20 (15.2-25.7) |
| Married | 6,664 | 14.8 (12.3-17.6) | 3,499 | 7.7 (5.9-10.0) | 4,499 | 10.2 (8.2-12.7) | 3,493 | 8.0 (5.9-10.6) | 5,047 | 11.1 (9.0-13.8) | 3,380 | 7.5 (5.6-9.9) |
| **WIC participation** | | | | | | | | | | | | |
| No | 7,083 | 15.7 (13.0-18.8) | 4,179 | 9.3 (7.3-11.7) | 5,181 | 12.2 (9.6-15.4) | 3,786 | 8.9 (6.8-11.6) | 5,958 | 12.8 (10.2-15.8) | 3,765 | 8.1 (6.0-10.8) |
| Yes | 6,600 | 32.5 (28.1-37.2) | 3,671 | 18.1 (14.6-22.1) | 5,587 | 27.3 (22.7-32.4) | 4,153 | 20.3 (15.8-25.6) | 5,423 | 28.1 (23.1-33.7) | 3,772 | 19.5 (15.0-25.0) |
| **Disability status** | | | | | | | | | | | | |
| No | 11,642 | 19.9 (17.4-22.6) | 6,714 | 11.5 (9.6-13.6) | 8,070 | 14.5 (12.3-17.1) | 6,749 | 12.1 (9.9-14.8) | 9,007 | 15.6 (13.2-18.4) | 5,472 | 9.5 (7.5-11.9) |
| Yes | 2,012 | 29.6 (21.6-39.2) | 1,296 | 19.1 (13.0-27.1) | 2,452 | 36.3 (26.3-47.7) | 1,063 | 15.8 (9.5-24.9) | 2,117 | 27.7 (19.7-37.4) | 1,933 | 25.3 (17.2-35.5) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Unintended pregnancy: includes mistimed or unwanted pregnancy; [4]Unsure: people who selected 'I wasn't sure what I wanted'

Table 57. Prevalence of receiving influenza vaccination before or during pregnancy and Tdap vaccination during pregnancy by sociodemographic characteristics, MA PRAMS, 2019-2021

| | 2019 | | | | 2020 | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Influenza vaccination[3] | | Tdap vaccination[4] | | Influenza vaccination[3] | | Tdap vaccination[4] | | Influenza vaccination[3] | | Tdap vaccination[4] | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | | | | |
| **Total** | 51,527 | 78.5 (75.8-80.9) | 54,971 | 89.6 (87.4-91.4) | 50,062 | 79.7 (76.7-82.4) | 52,511 | 89.2 (86.7-91.3) | 51,619 | 78.4 (75.4-81.2) | 56,183 | 89.7 (87.4-91.6) |
| **Race/ethnicity** | | | | | | | | | | | | |
| White, non-Hispanic | 31,390 | 79.6 (75.5-83.2) | 34,737 | 90.7 (87.4-93.2) | 29,329 | 80.3 (75.5-84.4) | 31,541 | 89.6 (85.5-92.7) | 31,470 | 80.3 (75.6-84.3) | 35,556 | 93.5 (90.1-95.7) |
| Black, non-Hispanic | 4,848 | 75.7 (70.8-80.0) | 5,030 | 88.0 (83.9-91.1) | 4,383 | 72.0 (66.9-76.6) | 4,733 | 85.9 (81.4-89.4) | 4,441 | 70.1 (64.4-75.3) | 4,537 | 78.1 (71.6-83.5) |
| Hispanic | 9,447 | 74.3 (69.8-78.4) | 9,474 | 86.4 (82.4-89.6) | 10,408 | 80.1 (75.5-84.1) | 10,158 | 88.6 (84.4-91.8) | 10,181 | 75.6 (70.7-79.9) | 10,094 | 82.2 (77.5-86.1) |
| Asian, non-Hispanic | 4,975 | 86.9 (82.5-90.3) | 4,810 | 93.5 (89.9-95.9) | 5,113 | 86.1 (81.5-89.7) | 5,118 | 93.4 (89.5-95.9) | 4,072 | 82.5 (77.1-86.9) | 4,505 | 95.8 (92.0-97.8) |
| Other, non-Hispanic | 381 | 60.8 (42.3-76.7) | 397 | 71.0 (51.6-84.9) | 293 | 71.8 (47.1-88.0) | 295 | 84.3 (54.6-96.0) | 232 | 68.5 (39.6-87.8) | 268 | 93.7 (66.5-99.1) |
| **Age (years)** | | | | | | | | | | | | |
| <20 | 674 | 66.4 (46.4-81.8) | 737 | 93.7 (76.5-98.6) | 1,081 | 76.2 (53.2-90.0) | 1,153 | 88.2 (72.9-95.4) | 612 | 55.3 (35.8-73.3) | 654 | 77.8 (57.2-90.1) |
| 20-29 | 14,929 | 71.3 (66.4-75.8) | 16,952 | 90.0 (86.6-92.7) | 14,521 | 72.1 (65.7-77.7) | 15,976 | 85.8 (80.0-90.2) | 13,332 | 71.1 (64.8-76.6) | 14,498 | 84.1 (79.0-88.1) |
| 30-39 | 33,031 | 82.1 (78.7-85.1) | 34,248 | 89.2 (86.2-91.7) | 31,234 | 84.2 (80.9-87.0) | 31,907 | 90.8 (87.8-93.2) | 35,723 | 81.8 (78.2-85.0) | 39,266 | 92.5 (89.8-94.5) |
| 40+ | 2,891 | 83.0 (70.4-90.9) | 3,034 | 89.7 (79.4-95.1) | 3,226 | 77.7 (65.7-86.4) | 3,476 | 91.1 (82.4-95.8) | 1,953 | 84.9 (71.5-92.6) | 1,765 | 82.9 (64.1-92.9) |
| **Education** | | | | | | | | | | | | |
| <High school | 3,601 | 76.0 (66.7-83.3) | 3,245 | 83.7 (74.2-90.2) | 3,948 | 82.9 (73.2-89.6) | 632 | 16.3 (9.8-25.8) | 3,135 | 67.7 (57.2-76.7) | 3,138 | 82.1 (73.7-88.2) |
| High school diploma | 6,966 | 72.6 (65.3-78.8) | 7,598 | 90.7 (85.0-94.4) | 6,574 | 69.2 (60.1-77.0) | 779 | 9.3 (5.6-15.0) | 6,191 | 64.5 (55.1-72.8) | 7,145 | 80.9 (72.9-86.9) |
| Some college | 10,609 | 67.4 (61.3-73.0) | 12,724 | 85.8 (80.7-89.7) | 8,899 | 69.7 (61.7-76.7) | 2,106 | 14.2 (10.3-19.3) | 9,344 | 72.1 (64.2-78.8) | 10,408 | 87.9 (81.5-92.3) |
| College graduate | 29,277 | 86.4 (82.9-89.3) | 30,229 | 92.4 (89.4-94.6) | 29,622 | 85.8 (82.3-88.8) | 2,474 | 7.6 (5.4-10.6) | 31,987 | 86.0 (82.5-88.9) | 34,560 | 94.0 (91.4-95.9) |
| **Insurance type** | | | | | | | | | | | | |
| Private | 33,340 | 84.7 (81.3-87.6) | 35,472 | 92.7 (90.0-94.8) | 31,811 | 85.8 (82.2-88.8) | 33,000 | 91.5 (88.3-93.9) | 33,761 | 86.2 (82.8-89.0) | 36,379 | 94.1 (91.7-95.9) |
| Medicaid | 15,808 | 69.1 (64.5-73.4) | 17,028 | 85.0 (81.0-88.2) | 16,121 | 72.1 (66.7-76.9) | 17,441 | 86.6 (81.9-90.2) | 15,126 | 66.7 (61.0-71.9) | 16,830 | 82.7 (77.8-86.7) |
| Other | 1,319 | 74.6 (57.7-86.4) | 1,332 | 82.7 (64.4-92.7) | 804 | 64.2 (40.9-82.3) | 749 | 67.5 (35.9-88.5) | 1,439 | 74.1 (52.5-88.1) | 1,332 | 74.7 (48.6-90.2) |
| **Household poverty level** | | | | | | | | | | | | |
| ≤100% FPL | 9,214 | 70.4 (64.4-75.7) | 9,717 | 87.3 (83.1-90.7) | 7,752 | 67.7 (59.7-74.8) | 8,127 | 81.8 (73.4-87.9) | 7,568 | 66.1 (58.2-73.2) | 8,519 | 82.4 (75.7-87.5) |
| >100% FPL | 40,356 | 80.7 (77.6-83.5) | 43,336 | 90.0 (87.4-92.2) | 39,178 | 83.1 (79.8-85.9) | 40,756 | 90.9 (88.1-93.1) | 41,587 | 81.7 (78.4-84.6) | 45,257 | 91.8 (89.3-93.7) |
| **Nativity** | | | | | | | | | | | | |
| Non-US-born | 15,321 | 81.2 (77.4-84.5) | 14,400 | 87.6 (84.2-90.4) | 17,185 | 80.0 (76.0-83.5) | 16,659 | 87.6 (83.2-90.9) | 16,020 | 77.5 (73.1-81.3) | 15,868 | 85.4 (81.2-88.8) |
| US-born | 36,181 | 77.3 (73.9-80.5) | 40,546 | 90.2 (87.5-92.4) | 32,877 | 79.6 (75.4-83.2) | 35,852 | 90.0 (86.7-92.5) | 35,599 | 78.9 (74.8-82.4) | 40,315 | 91.4 (88.6-93.6) |
| **Marital status** | | | | | | | | | | | | |
| Unmarried | 14,656 | 70.1 (65.2-74.7) | 16,691 | 88.7 (85.2-91.4) | 13,015 | 67.9 (61.5-73.7) | 14,413 | 83.7 (77.7-88.3) | 13,867 | 67.1 (60.7-73.0) | 16,138 | 85.3 (80.4-89.2) |
| Married | 36,871 | 82.3 (79.1-85.2) | 38,279 | 89.9 (87.1-92.2) | 37,048 | 84.9 (81.8-87.6) | 38,098 | 91.5 (88.7-93.6) | 37,752 | 83.6 (80.4-86.3) | 40,045 | 91.5 (88.9-93.6) |
| **WIC participation** | | | | | | | | | | | | |
| No | 36,979 | 81.9 (78.6-84.8) | 39,885 | 91.2 (88.6-93.3) | 35,664 | 83.8 (80.3-86.8) | 37,088 | 90.9 (87.9-93.3) | 38,377 | 82.4 (78.9-85.5) | 41,944 | 92.5 (90.0-94.4) |
| Yes | 14,300 | 70.7 (65.9-75.1) | 14,994 | 85.5 (81.3-89.0) | 14,304 | 71.3 (65.6-76.4) | 15,310 | 85.4 (80.1-89.4) | 13,009 | 68.4 (62.4-73.8) | 14,102 | 82.5 (77.1-86.9) |
| **Disability status** | | | | | | | | | | | | |
| No | 46,610 | 79.8 (77.0-82.4) | 49,345 | 89.9 (87.7-91.8) | 44,348 | 80.3 (77.1-83.1) | 46,294 | 89.1 (86.3-91.3) | 45,561 | 79.2 (76.0-82.1) | 49,646 | 90.4 (88.0-92.4) |
| Yes | 4,535 | 67.3 (58.0-75.4) | 5,185 | 85.9 (76.6-91.9) | 5,070 | 76.2 (65.1-84.6) | 5,705 | 92.8 (82.9-97.2) | 5,455 | 73.8 (63.5-82.0) | 5,891 | 84.2 (75.0-90.5) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Influenza (Flu) vaccination in the 12 months prior to birth of new infant; [4]Tdap vaccination during pregnancy

## Table 58. Prevalence of being offered an HIV test and receiving an HIV test during pregnancy, by sociodemographic characteristics, MA PRAMS, 2019-2021

| | 2019 | | | | 2020 | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Offered HIV test[3] | | Had an HIV test[4] | | Offered HIV test[3] | | Had an HIV test[4] | | Offered HIV test[3] | | Had an HIV test[4] | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 58,393 | 87.6 (85.4-89.5) | 31,894 | 47.8 (44.8-50.9) | 53,903 | 84.1 (81.3-86.5) | 32,037 | 50.0 (46.6-53.4) | 55,513 | 83.3 (80.5-85.7) | 33,233 | 49.9 (46.4-53.3) |
| **Race/ethnicity** | | | | | | | | | | | | |
| White, non-Hispanic | 34,641 | 87.1 (83.6-89.9) | 16,926 | 42.5 (37.9-47.3) | 30,326 | 82.4 (77.8-86.2) | 15,690 | 42.6 (37.4-48.1) | 32,385 | 82.0 (77.6-85.7) | 17,698 | 44.8 (39.6-50.1) |
| Black, non-Hispanic | 5,946 | 88.9 (84.0-92.5) | 4,320 | 64.6 (59.0-69.9) | 5,702 | 89.1 (85.2-92.1) | 4,022 | 62.9 (57.4-68.0) | 5,712 | 87.6 (83.2-90.9) | 3,959 | 60.7 (54.8-66.3) |
| Hispanic | 11,664 | 89.5 (86.1-92.2) | 7,601 | 58.3 (53.5-63.1) | 11,835 | 86.9 (82.8-90.1) | 8,645 | 63.5 (58.3-68.3) | 11,674 | 85.1 (80.9-88.6) | 7,982 | 58.2 (52.9-63.3) |
| Asian, non-Hispanic | 4,920 | 85.1 (80.8-88.6) | 2,436 | 42.2 (36.8-47.7) | 4,834 | 80.3 (75.4-84.5) | 2,742 | 45.6 (39.9-51.3) | 4,019 | 79.7 (74.1-84.4) | 2,477 | 49.1 (42.8-55.5) |
| Other, non-Hispanic | 474 | 75.6 (57.1-87.9) | 237 | 37.7 (22.0-56.5) | 340 | 83.4 (57.8-94.9) | 273 | 67.0 (41.1-85.5) | 339 | 100 (.-.) | 214 | 63.0 (36.5-83.5) |
| **Age (years)** | | | | | | | | | | | | |
| <20 | 927 | 89.0 (70.5-96.5) | 598 | 57.4 (37.9-74.9) | 1,281 | 88.4 (72.5-95.7) | 768 | 53.0 (32.7-72.4) | 877 | 79.3 (61.8-90.0) | 605 | 54.7 (36.3-71.9) |
| 20-29 | 18,528 | 86.8 (82.6-90.1) | 10,988 | 51.5 (46.3-56.6) | 16,957 | 81.0 (75.6-85.4) | 10,830 | 51.7 (45.6-57.7) | 16,162 | 84.7 (79.9-88.5) | 10,238 | 53.7 (47.5-59.7) |
| 30-39 | 35,936 | 88.2 (85.3-90.5) | 18,697 | 45.9 (41.8-50.0) | 31,994 | 85.2 (81.6-88.2) | 18,479 | 49.2 (44.7-53.7) | 36,478 | 82.8 (79.2-86.0) | 21,133 | 48.0 (43.7-52.4) |
| 40+ | 3,002 | 84.9 (72.6-92.2) | 1,611 | 45.5 (32.7-59.0) | 3,672 | 88.2 (78.5-93.8) | 1,960 | 47.1 (34.9-59.6) | 1,995 | 81.9 (64.7-91.8) | 1,257 | 51.6 (35.1-67.7) |
| **Education** | | | | | | | | | | | | |
| <High school | 4,512 | 88.6 (81.0-93.4) | 2,872 | 56.4 (47.2-65.2) | 4,216 | 85.1 (77.4-90.4) | 2,967 | 59.8 (49.9-69.0) | 3,874 | 81.9 (72.4-88.6) | 2,795 | 59.1 (49.3-68.2) |
| High school diploma | 8,660 | 88.7 (83.4-92.5) | 4,930 | 50.5 (43.3-57.7) | 8,667 | 87.4 (79.4-92.5) | 5,606 | 56.5 (47.4-65.2) | 8,388 | 85.3 (76.9-91) | 5,521 | 56.1 (47.1-64.8) |
| Some college | 13,872 | 87.4 (82.4-91.1) | 8,759 | 55.2 (48.9-61.3) | 11,115 | 84.4 (77.6-89.5) | 6,819 | 51.8 (44.1-59.4) | 11,067 | 84.6 (77.9-89.5) | 7,485 | 57.2 (49.1-64.9) |
| College graduate | 29,728 | 87.0 (83.7-89.8) | 14,628 | 42.8 (38.3-47.4) | 28,725 | 82.6 (78.7-85.9) | 15,849 | 45.6 (40.9-50.3) | 30,977 | 82.4 (78.6-85.7) | 16,660 | 44.3 (39.8-49.0) |
| **Insurance type** | | | | | | | | | | | | |
| Private | 33,883 | 85.3 (82.1-88.1) | 16,955 | 42.7 (38.5-47.0) | 30,304 | 80.9 (77.0-84.3) | 16,118 | 43.0 (38.6-47.6) | 31,868 | 80.8 (76.9-84.2) | 17,800 | 45.1 (40.6-49.8) |
| Medicaid | 21,189 | 90.5 (87.4-92.9) | 13,456 | 57.5 (52.8-62.0) | 20,765 | 89.4 (85.4-92.5) | 14,406 | 62.1 (56.6-67.2) | 19,896 | 86.0 (81.6-89.5) | 13,204 | 57.1 (51.5-62.4) |
| Other | 1,717 | 96.2 (88.7-98.8) | 668 | 37.4 (22.6-55.1) | 946 | 72.0 (43.5-89.6) | 554 | 42.1 (23.5-63.3) | 1,832 | 94.4 (83.5-98.2) | 906 | 46.7 (27.8-66.5) |
| **Household poverty level** | | | | | | | | | | | | |
| ≤100% FPL | 12,634 | 95.8 (93.7-97.2) | 8,419 | 63.8 (58.0-69.3) | 10,284 | 86.9 (79.8-91.8) | 6,658 | 56.3 (48.7-63.6) | 10,382 | 88.6 (83.2-92.4) | 6,802 | 58.1 (50.6-65.2) |
| >100% FPL | 43,285 | 85.8 (83.0-88.2) | 21,758 | 43.1 (39.5-46.8) | 39,480 | 83.0 (79.8-85.9) | 22,230 | 46.8 (42.7-50.8) | 42,219 | 82.3 (78.9-85.2) | 24,126 | 47.0 (43.0-51.1) |
| **Nativity** | | | | | | | | | | | | |
| Non-US-born | 17,313 | 89.2 (86.3-91.5) | 10,680 | 55.0 (50.7-59.2) | 19,462 | 87.8 (84.6-90.5) | 13,093 | 59.1 (54.5-63.5) | 18,270 | 86.1 (82.6-89.0) | 11,854 | 55.8 (51.1-60.5) |
| US-born | 41,055 | 86.9 (84.0-89.3) | 21,189 | 44.8 (40.9-48.8) | 34,442 | 82.1 (78.2-85.4) | 18,944 | 45.1 (40.6-49.8) | 37,242 | 82.0 (78.2-85.2) | 21,379 | 47.1 (42.5-51.6) |
| **Marital status** | | | | | | | | | | | | |
| Unmarried | 18,887 | 88.7 (84.8-91.7) | 12,578 | 59.1 (53.9-64.1) | 16,841 | 85.2 (80.0-89.3) | 12,005 | 60.8 (54.5-66.7) | 17,934 | 85.5 (80.3-89.5) | 12,613 | 60.1 (53.7-66.2) |
| Married | 39,506 | 87.0 (84.3-89.4) | 19,316 | 42.6 (38.8-46.4) | 37,063 | 83.5 (80.2-86.4) | 20,032 | 45.2 (41.1-49.2) | 37,579 | 82.3 (78.9-85.2) | 20,620 | 45.1 (41.1-49.2) |
| **WIC participation** | | | | | | | | | | | | |
| No | 39,072 | 86.2 (83.2-88.7) | 19,681 | 43.4 (39.5-47.4) | 35,039 | 81.8 (78.1-85.0) | 19,000 | 44.4 (40.2-48.6) | 38,605 | 82.2 (78.7-85.2) | 21,947 | 46.7 (42.5-51.0) |
| Yes | 18,893 | 91.8 (88.8-94.0) | 12,054 | 58.5 (53.7-63.2) | 18,640 | 89.3 (85.6-92.1) | 12,855 | 61.6 (55.8-67.0) | 16,740 | 86.1 (81.4-89.7) | 11,166 | 57.4 (51.5-63.1) |
| **Disability status** | | | | | | | | | | | | |
| No | 51,849 | 87.8 (85.4-89.8) | 28,677 | 48.6 (45.3-51.9) | 47,348 | 84.2 (81.3-86.7) | 28,080 | 49.9 (46.3-53.6) | 48,208 | 83.2 (80.2-85.8) | 28,665 | 49.5 (45.7-53.2) |
| Yes | 6,119 | 89.6 (83.2-93.7) | 2,926 | 42.8 (34.1-52.1) | 5,665 | 83.5 (72.9-90.5) | 3,144 | 46.3 (35.9-57.1) | 6,450 | 84.2 (75.1-90.3) | 3,877 | 50.6 (40.8-60.4) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Offered HIV test during any prenatal care visit, patient was asked if wanted to be tested for HIV; [4]Tested for HIV at any time during the most recent pregnancy

Table 59. Prevalence of reasons why respondents did not have an HIV test during their most recent pregnancy or delivery, MA PRAMS, 2019-2021

| | 2019 | | 2020 | | 2021 | |
|---|---|---|---|---|---|---|
| **Reasons** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| Not offered test | 7,783 | 39.7 (34.1-45.5) | 10,027 | 51.4 (44.9-57.8) | 11,029 | 54.5 (48.1-60.7) |
| Didn't want to have test | 1,872 | 9.5 (6.6-13.5) | 1,750 | 9.0 (6.0-13.2) | 2,554 | 12.6 (9.0-17.4) |
| Already knew HIV status | 7,500 | 37.9 (32.3-43.9) | 5,224 | 26.7 (21.4-32.8) | 5,833 | 28.8 (23.4-34.8) |
| Didn't think was at risk for HIV | 6,308 | 31.8 (26.5-37.7) | 5,975 | 30.6 (25.1-36.6) | 7,572 | 37.4 (31.4-43.8) |
| Didn't want people to think was at risk for HIV | Insufficient data[2] | | Insufficient data[2] | | 0 | 0 (.-.) |
| Afraid of getting the results | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| Was tested before this pregnancy | 5,771 | 29.1 (24.1-34.8) | 4,040 | 20.7 (16.1-26.4) | 4,020 | 19.8 (15.3-25.3) |
| Other reason | 834 | 4.2 (2.4-7.4) | 851 | 4.4 (2.3-8.2) | 637 | 3.1 (1.6-6.3) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 60. Prevalence of cesarean and vaginal delivery by sociodemographic characteristics, MA PRAMS, 2019-2021

| | 2019 | | | | 2020 | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | cesarean delivery | | vaginal delivery | | cesarean delivery | | vaginal delivery | | cesarean delivery | | vaginal delivery | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 21,330 | 32.1 (29.2-35.1) | 43,834 | 66.0 (62.9-68.9) | 19,908 | 31.1 (28.1-34.4) | 42,584 | 66.6 (63.3-69.8) | 22,965 | 34.8 (31.6-38.2) | 82,539 | 64.5 (62.1-66.8) |
| **Race/ethnicity** | | | | | | | | | | | | |
| White, non-Hispanic | 12,313 | 31.1 (26.8-35.8) | 26,635 | 67.4 (62.7-71.7) | 11,503 | 31.3 (26.5-36.4) | 24,704 | 67.1 (61.9-72.0) | 14,282 | 36.2 (31.3-41.5) | 24,517 | 62.2 (57.0-67.2) |
| Black, non-Hispanic | 2,356 | 35.2 (30.3-40.6) | 4,146 | 62.0 (56.6-67.2) | 2,020 | 31.6 (26.9-36.6) | 4,186 | 65.4 (60.2-70.3) | 2,438 | 37.5 (31.9-43.5) | 3,742 | 57.6 (51.6-63.4) |
| Hispanic | 4,156 | 31.9 (27.6-36.6) | 8,592 | 66.0 (61.2-70.4) | 4,286 | 31.5 (26.8-36.6) | 8,812 | 64.7 (59.5-69.5) | 4,165 | 31.0 (26.3-36.1) | 8,628 | 64.2 (59.0-69.1) |
| Asian, non-Hispanic | 1,909 | 33.0 (28.0-38.5) | 3,682 | 63.7 (58.2-68.9) | 1,825 | 30.3 (25.4-35.8) | 4,084 | 67.9 (62.3-72.9) | 1,542 | 30.6 (25.0-36.8) | 3,373 | 66.9 (60.7-72.6) |
| Other, non-Hispanic | 263 | 41.9 (25.6-60.2) | 364 | 58.1 (39.8-74.4) | 146 | 35.7 (16.3-61.3) | 262 | 64.3 (38.7-83.7) | Insufficient data[2] | | 232 | 68.5 (39.6-87.8) |
| **Age (years)** | | | | | | | | | | | | |
| <20 | Insufficient data[2] | | 916 | 88.1 (73.3-95.2) | 178 | 12.3 (3.4-35.6) | 1,271 | 87.7 (64.4-96.6) | Insufficient data[2] | | 950 | 88.2 (72.1-95.6) |
| 20-29 | 5,468 | 25.6 (21.5-30.3) | 15,657 | 73.3 (68.7-77.5) | 4,778 | 22.9 (18.5-28.1) | 15,723 | 75.4 (70.2-80.0) | 4,990 | 26.5 (21.3-32.4) | 13,387 | 71.0 (65.0-76.4) |
| 30-39 | 13,981 | 34.5 (30.7-38.6) | 25,504 | 62.9 (58.8-66.9) | 12,877 | 34.4 (30.2-38.8) | 23,516 | 62.8 (58.3-67.0) | 16,404 | 37.6 (33.5-42.0) | 26,121 | 59.9 (55.6-64.2) |
| 40+ | 1,756 | 49.6 (36.5-62.9) | 1,757 | 49.7 (36.5-62.9) | 2,076 | 49.8 (37.4-62.3) | 2,074 | 49.8 (37.3-62.3) | 1,444 | 59.3 (42.6-74.0) | 827 | 33.9 (20.6-50.5) |
| **Education** | | | | | | | | | | | | |
| <High school | 1,389 | 27.3 (19.9-36.1) | 3,539 | 69.5 (60.6-77.1) | 1,383 | 27.9 (20.0-37.5) | 3,438 | 69.4 (59.6-77.6) | 1,231 | 26.4 (18.2-36.7) | 3,150 | 67.5 (57.4-76.3) |
| High school diploma | 3,183 | 32.6 (26.2-39.7) | 6,282 | 64.4 (57.2-70.9) | 2,421 | 24.4 (17.9-32.3) | 7,334 | 73.9 (66.0-80.6) | 3,284 | 33.6 (25.6-42.6) | 6,158 | 63.0 (54.0-71.2) |
| Some college | 5,441 | 34.3 (28.5-40.5) | 10,334 | 65.1 (58.9-70.9) | 4,690 | 35.6 (28.6-43.3) | 7,996 | 60.7 (53.0-68.0) | 4,464 | 34.8 (27.4-43.0) | 8,185 | 63.8 (55.6-71.3) |
| College graduate | 10,806 | 31.6 (27.5-36.1) | 22,657 | 66.3 (61.8-70.6) | 11,202 | 32.2 (28.0-36.8) | 22,994 | 66.1 (61.5-70.4) | 13,533 | 36.0 (31.7-40.6) | 23,169 | 61.7 (57.0-66.1) |
| **Insurance type** | | | | (-) | | | | | | | | |
| Private | 12,656 | 32.1 (28.1-36.3) | 26,154 | 66.3 (62.0-70.3) | 11,798 | 31.6 (27.5-35.9) | 25,084 | 67.1 (62.7-71.3) | 11,798 | 31.6 (27.5-35.9) | 24,225 | 61.6 (57.0-66.1) |
| Medicaid | 7,716 | 32.9 (28.7-37.5) | 15,096 | 64.5 (59.9-68.8) | 6,838 | 29.6 (24.9-34.8) | 15,489 | 67.0 (61.7-71.9) | 6,838 | 29.6 (24.9-34.8) | 14,432 | 63.5 (58.0-68.7) |
| Other | 679 | 38.0 (23.2-55.5) | 1,088 | 61.0 (43.6-76) | 534 | 40.6 (22.0-62.5) | 721 | 54.9 (33.4-74.7) | 534 | 40.6 (22.0-62.5) | 978 | 54.9 (34.4-73.9) |
| **Household poverty level** | | | | | | | | | | | | |
| ≤100% FPL | 4,719 | 35.8 (30.0-42.0) | 8,108 | 61.5 (55.3-67.3) | 3,529 | 30.1 (23.6-37.5) | 7,684 | 65.5 (58.1-72.2) | 3,338 | 29.3 (23.1-36.4) | 7,399 | 65.0 (57.7-71.6) |
| >100% FPL | 15,800 | 31.5 (28.1-35.0) | 33,643 | 67.0 (63.4-70.4) | 15,305 | 32.3 (28.6-36.2) | 31,355 | 66.1 (62.2-69.8) | 18,385 | 36.1 (32.2-40.1) | 31,631 | 62.1 (58.1-66.0) |
| **Nativity** | | | | | | | | | | | | |
| Non-US-born | 6,457 | 33.3 (29.5-37.3) | 12,547 | 64.6 (60.6-68.5) | 7,332 | 33.1 (28.9-37.6) | 13,980 | 63.1 (58.5-67.4) | 7,175 | 34.2 (29.7-39.0) | 13,069 | 62.3 (57.5-66.9) |
| US-born | 14,873 | 31.6 (28.0-35.6) | 31,262 | 66.5 (62.5-70.2) | 12,576 | 30.1 (26.1-34.5) | 28,605 | 68.5 (64.0-72.6) | 15,790 | 35.1 (30.8-39.6) | 28,216 | 62.7 (58.2-67.1) |
| **Marital status** | | | | | | | | | | | | |
| Unmarried | 6,876 | 32.3 (27.6-37.4) | 13,978 | 65.6 (60.5-70.4) | 5,748 | 29.2 (24.0-35.1) | 13,202 | 67.2 (61.2-72.7) | 7,307 | 35.1 (29.2-41.4) | 12,942 | 62.1 (55.7-68.1) |
| Married | 14,454 | 32.0 (28.5-35.7) | 29,856 | 66.1 (62.4-69.7) | 14,161 | 32.0 (28.3-35.9) | 29,383 | 66.4 (62.4-70.1) | 15,657 | 34.7 (30.9-38.8) | 28,344 | 62.8 (58.7-66.8) |
| **Disability status** | | | | | | | | | | | | |
| No | 18,897 | 32.1 (29.1-35.3) | 38,827 | 66.0 (62.8-69.1) | 17,454 | 31.1 (27.8-34.6) | 37,298 | 66.6 (63.0-69.9) | 19,852 | 34.6 (31.1-38.3) | 35,925 | 62.7 (59.0-66.3) |
| Yes | 2,234 | 32.7 (24.4-42.3) | 4,448 | 65.1 (55.6-73.5) | 2,099 | 30.9 (22.6-40.7) | 4,552 | 67.1 (57.2-75.7) | 2,807 | 36.9 (27.9-47.0) | 4,652 | 61.2 (51.2-70.4) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 61. Prevalence of postpartum visit by sociodemographic characteristics, MA PRAMS, 2019-2021

| | Postpartum Visit | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | 2020 | | 2021 | |
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 61,153 | 92.9 (91.1-94.3) | 56,635 | 90.3 (88.2-92.1) | 60,645 | 92.6 (90.7-94.1) |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 37,520 | 94.8 (92.1-96.6) | 34,384 | 94.4 (91.0-96.6) | 37,338 | 95.5 (92.6-97.3) |
| Black, non-Hispanic | 5,692 | 89.1 (83.9-92.8) | 5,143 | 83.8 (79.4-87.3) | 5,552 | 89.1 (84.6-92.4) |
| Hispanic | 11,321 | 88.7 (85.2-91.5) | 10,834 | 83.5 (79.1-87.1) | 11,280 | 84.9 (80.8-88.3) |
| Asian, non-Hispanic | 5,343 | 93.4 (90.0-95.8) | 5,308 | 89.0 (84.6-92.3) | 4,807 | 95.4 (91.7-97.5) |
| Other, non-Hispanic | 567 | 90.5 (74.3-96.9) | 358 | 95.7 (75.2-99.4) | 250 | 82.4 (49.7-95.7) |
| **Age (years)** | | | | | | |
| <20 | 871 | 83.7 (65.2-93.4) | 1,116 | 80.4 (59.8-91.9) | 886 | 82.2 (65.2-92.0) |
| 20-29 | 18,601 | 89.1 (85.4-92.0) | 17,731 | 86.6 (81.7-90.3) | 16,773 | 90.7 (86.8-93.5) |
| 30-39 | 38,328 | 94.8 (92.7-96.4) | 34,025 | 92.6 (90.1-94.5) | 40,935 | 94.1 (91.8-95.8) |
| 40+ | 3,352 | 95.2 (90.7-97.6) | 3,763 | 91.5 (85.7-95.1) | 2,052 | 84.2 (68.8-92.8) |
| **Education** | | | | | | |
| <High school | 3,677 | 76.9 (67.3-84.3) | 3,650 | 78.7 (69.2-85.8) | 3,609 | 81.2 (73.6-87.0) |
| High school diploma | 8,361 | 87.3 (81.1-91.6) | 7,657 | 80.5 (73.0-86.3) | 8,146 | 85.9 (79.0-90.8) |
| Some college | 14,555 | 92.6 (88.7-95.2) | 11,316 | 86.8 (79.9-91.6) | 11,557 | 89.8 (83.9-93.7) |
| College graduate | 32,887 | 96.8 (94.7-98.1) | 32,988 | 96.1 (94.2-97.4) | 36,152 | 96.8 (94.7-98.1) |
| **Insurance type** | | | | | | |
| Private | 38,351 | 97.0 (95.2-98.2) | 35,179 | 94.8 (92.5-96.5) | 38,092 | 97.6 (95.7-98.6) |
| Medicaid | 19,946 | 87.4 (83.7-90.3) | 19,064 | 85.0 (80.9-88.3) | 18,841 | 84.1 (79.7-87.7) |
| Other | 1,586 | 88.9 (69.8-96.5) | 1,132 | 88.1 (74.7-94.9) | 1,801 | 93.9 (84.8-97.7) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 11,174 | 85.1 (79.8-89.2) | 8,808 | 75.2 (68.0-81.2) | 9,441 | 82.7 (76.4-87.6) |
| >100% FPL | 47,934 | 95.5 (93.7-96.8) | 44,639 | 94.8 (92.7-96.3) | 48,666 | 95.5 (93.6-96.9) |
| **Nativity** | | | | | | |
| Non-US-born | 17,026 | 90.3 (87.4-92.6) | 18,195 | 85.1 (81.7-88.0) | 18,176 | 87.5 (84.0-90.4) |
| US-born | 44,102 | 93.9 (91.6-95.6) | 38,440 | 93.0 (90.1-95.1) | 42,469 | 94.9 (92.6-96.5) |
| **Marital status** | | | | | | |
| Unmarried | 18,412 | 87.6 (83.6-90.7) | 16,331 | 85.2 (80.1-89.2) | 17,635 | 86.6 (82.0-90.1) |
| Married | 42,740 | 95.4 (93.6-96.7) | 40,304 | 92.5 (90.3-94.2) | 43,011 | 95.3 (93.4-96.6) |
| **WIC participation** | | | | | | |
| No | 43,035 | 95.6 (93.7-96.9) | 39,442 | 93.2 (90.7-95.0) | 44,421 | 95.4 (93.3-96.8) |
| Yes | 17,787 | 87.1 (83.2-90.2) | 17,111 | 84.4 (79.9-88.0) | 16,089 | 85.6 (81.3-89.1) |
| **Disability status** | | | | | | |
| No | 54,710 | 93.0 (91.2-94.5) | 50,755 | 91.1 (88.9-92.9) | 54,009 | 94.2 (92.6-95.5) |
| Yes | 6,176 | 91.2 (84.2-95.3) | 5,574 | 83.5 (74.6-89.7) | 6,257 | 81.7 (71.9-88.6) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5)

## Table 62. Prevalence of types of postpartum contraception by sociodemographic characteristics, MA PRAMS, 2019

| | Sterilization[3] | | LARC[4] | | Other hormonal contraception[5] | | Other non-hormonal contraception[6] | | No Postpartum Contraception[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 5,707 | 8.7 (7.1-10.7) | 12,937 | 19.7 (17.4-22.3) | 14,961 | 22.8 (20.3-25.6) | 13,724 | 20.9 (18.5-23.6) | 18,245 | 27.8 (25.1-30.8) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 3,170 | 8.0 (5.8-11.1) | 7,013 | 17.8 (14.4-21.8) | 9,061 | 23.0 (19.2-27.3) | 8,617 | 21.9 (18.2-26.1) | 11,522 | 29.3 (25.1-33.8) |
| Black, non-Hispanic | 451 | 7.1 (4.0-12.2) | 1,396 | 22.0 (17.9-26.7) | 1,505 | 23.7 (19.2-28.9) | 1,332 | 21.0 (16.5-26.3) | 1,662 | 26.2 (21.8-31.2) |
| Hispanic | 1,464 | 11.5 (8.8-15.0) | 3,482 | 27.3 (23.2-32.0) | 3,523 | 27.7 (23.5-32.3) | 1,761 | 13.8 (10.8-17.5) | 2,502 | 19.7 (16.1-23.8) |
| Asian, non-Hispanic | 357 | 6.3 (4.0-9.8) | 762 | 13.4 (10.0-17.7) | 572 | 10.0 (7.1-14.0) | 1,867 | 32.7 (27.7-38.2) | 2,144 | 37.6 (32.4-43.1) |
| Other, non-Hispanic | Insufficient data[2] | | 136 | 21.6 (10.1-40.2) | 186 | 29.7 (15.8-48.7) | 110 | 17.6 (7.6-35.7) | 153 | 24.4 (12.1-42.9) |
| **Age (years)** | | | | | | | | | | |
| <20 | 0 | 0 (.-.) | 377 | 36.2 (19.3-57.4) | 431 | 41.4 (23.6-61.8) | 99 | 9.5 (2.8-27.7) | 134 | 12.9 (4.8-30.3) |
| 20-29 | 1,169 | 5.6 (3.8-8.2) | 5,042 | 24.1 (20.0-28.8) | 5,213 | 25.0 (20.9-29.6) | 4,149 | 19.9 (15.9-24.5) | 5,306 | 25.4 (21.1-30.3) |
| 30-39 | 3,922 | 9.8 (7.6-12.5) | 7,136 | 17.8 (14.8-21.2) | 8,840 | 22.0 (18.7-25.7) | 8,901 | 22.2 (19.0-25.7) | 11,362 | 28.3 (24.7-32.2) |
| 40+ | 616 | 17.6 (8.9-31.9) | 383 | 11.0 (5.7-20.0) | 476 | 13.6 (6.6-25.9) | 575 | 16.5 (8.9-28.5) | 1,443 | 41.3 (28.7-55.2) |
| **Education** | | | | | | | | | | |
| <High school | 512 | 10.5 (6.6-16.4) | 1,274 | 26.2 (19.2-34.7) | 1,521 | 31.3 (23.5-40.3) | 484 | 10.0 (5.5-17.3) | 1,068 | 22.0 (14.7-31.5) |
| High school diploma | 987 | 10.4 (6.7-15.6) | 2,652 | 27.8 (21.5-35.1) | 2,324 | 24.4 (18.5-31.4) | 1,469 | 15.4 (11.0-21.2) | 2,099 | 22.0 (16.6-28.7) |
| Some college | 2,007 | 13.0 (9.1-18.3) | 2,869 | 18.5 (14.3-23.6) | 3,451 | 22.3 (17.7-27.7) | 3,023 | 19.5 (15.0-25.1) | 4,121 | 26.6 (21.3-32.7) |
| College graduate | 1,809 | 5.3 (3.6-7.9) | 6,016 | 17.7 (14.4-21.6) | 7,347 | 21.7 (18.0-25.9) | 8,309 | 24.5 (20.8-28.6) | 10,424 | 30.7 (26.6-35.2) |
| **Insurance type** | | | | | | | | | | |
| Private | 3,027 | 7.7 (5.6-10.5) | 6,638 | 16.8 (13.8-20.4) | 8,704 | 22.1 (18.6-25.9) | 9,878 | 25.0 (21.5-29.0) | 11,188 | 28.4 (24.6-32.4) |
| Medicaid | 2,605 | 11.5 (8.9-14.8) | 5,721 | 25.3 (21.5-29.5) | 5,596 | 24.7 (20.9-29.0) | 2,949 | 13.0 (10.3-16.3) | 5,774 | 25.5 (21.4-30.1) |
| Other | Insufficient data[2] | | 131 | 7.4 (3.2-16.2) | 417 | 23.4 (12.4-39.6) | 540 | 30.3 (17.0-47.8) | 638 | 35.7 (20.0-55.3) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 1,766 | 13.7 (9.8-18.7) | 3,410 | 26.4 (21.6-31.9) | 2,950 | 22.8 (18.1-28.4) | 1,422 | 11.0 (8.2-14.7) | 3,367 | 26.1 (20.8-32.1) |
| >100% FPL | 3,741 | 7.5 (5.7-9.7) | 9,167 | 18.3 (15.5-21.4) | 11,111 | 22.1 (19.2-25.4) | 11,810 | 23.5 (20.5-26.8) | 14,347 | 28.6 (25.3-32.1) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 1,516 | 8.1 (6.1-10.6) | 4,401 | 23.4 (19.8-27.3) | 3,820 | 20.3 (17.2-23.8) | 4,321 | 23.0 (19.6-26.7) | 4,767 | 25.3 (21.7-29.4) |
| US-born | 4,191 | 9.0 (6.9-11.6) | 8,536 | 18.3 (15.4-21.6) | 11,141 | 23.8 (20.6-27.5) | 9,379 | 20.1 (17.0-23.5) | 13,479 | 28.8 (25.3-32.7) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 1,882 | 9.0 (6.5-12.5) | 4,602 | 22.1 (18.3-26.4) | 5,011 | 24.0 (19.9-28.7) | 3,125 | 15.0 (11.5-19.3) | 6,224 | 29.9 (25.2-35.0) |
| Married | 3,825 | 8.6 (6.6-11.1) | 8,335 | 18.6 (15.8-21.9) | 9,950 | 22.2 (19.1-25.7) | 10,599 | 23.7 (20.6-27.1) | 12,021 | 26.9 (23.5-30.5) |
| **WIC participation** | | | | | | | | | | |
| No | 3,295 | 7.3 (5.4-9.8) | 7,840 | 17.4 (14.6-20.7) | 9,616 | 21.4 (18.3-24.9) | 10,933 | 24.3 (21.1-27.9) | 13,270 | 29.5 (26.0-33.3) |
| Yes | 2,285 | 11.3 (8.6-14.6) | 5,097 | 25.2 (21.3-29.4) | 5,251 | 25.9 (21.8-30.4) | 2,727 | 13.5 (10.6-16.9) | 4,905 | 24.2 (20.1-28.9) |
| **Disability status** | | | | | | | | | | |
| No | 5,320 | 9.1 (7.3-11.2) | 11,675 | 19.9 (17.4-22.7) | 12,852 | 21.9 (19.3-24.8) | 12,417 | 21.2 (18.6-24.0) | 16,331 | 27.9 (24.9-31.0) |
| Yes | 387 | 5.8 (2.8-11.6) | 1,261 | 18.8 (12.7-26.9) | 1,990 | 29.6 (21.7-39.0) | 1,243 | 18.5 (12.3-27.0) | 1,831 | 27.3 (19.9-36.1) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Sterilization includes tubal ligation and vasectomy; [4]LARC: Long-acting reversible contraception includes intrauterine devices and implants; [5]Other hormonal contraception: includes shots, pills, patch, and vaginal ring; [6]Other non-hormonal contraception includes condoms, diaphragm, withdrawal, natural family planning including rhythm method; [7]No contraception includes people who reported not having sex

## Table 63. Prevalence of types of postpartum contraception by sociodemographic characteristics, MA PRAMS, 2020

| | Sterilization[3] | | LARC[4] | | Other hormonal contraception[5] | | Other non-hormonal contraception[6] | | No Postpartum Contraception[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 4,863 | 7.7 (6.1-9.8) | 9,843 | 15.6 (13.4-18.2) | 14,686 | 23.3 (20.6-26.4) | 16,708 | 26.6 (23.6-29.8) | 16,800 | 26.7 (23.7-29.9) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 2,427 | 6.6 (4.3-10.1) | 4,430 | 12.1 (8.9-16.2) | 8,896 | 24.3 (20.0-29.1) | 11,128 | 30.4 (25.7-35.6) | 9,725 | 26.6 (22.0-31.7) |
| Black, non-Hispanic | 307 | 5.0 (3.3-7.5) | 1,292 | 21.1 (17.0-25.9) | 1,263 | 20.6 (16.5-25.4) | 1,512 | 24.7 (19.8-30.3) | 1,751 | 28.6 (23.4-34.4) |
| Hispanic | 1,821 | 14 (10.7-18.2) | 3,353 | 25.8 (21.3-30.9) | 3,128 | 24.1 (19.9-28.9) | 1,526 | 11.8 (8.8-15.5) | 3,150 | 24.3 (20.0-29.1) |
| Asian, non-Hispanic | 253 | 4.2 (2.4-7.5) | 512 | 8.6 (5.8-12.5) | 875 | 14.7 (11.0-19.3) | 2,215 | 37.2 (31.9-42.9) | 2,096 | 35.2 (30.0-40.9) |
| Other, non-Hispanic | Insufficient data[2] | | 125 | 33.6 (15.3-58.5) | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Age (years)** | | | | | | | | | | |
| <20 | 0 | 0 (.-.) | 251 | 18.1 (8.3-35.2) | 575 | 41.4 (22.7-62.9) | 238 | 17.2 (5.4-42.8) | 324 | 23.3 (10.1-45.2) |
| 20-29 | 852 | 4.2 (2.3-7.6) | 4,461 | 21.9 (17.2-27.4) | 5,400 | 26.5 (21.6-32.1) | 4,388 | 21.5 (16.8-27.1) | 5,268 | 25.9 (20.6-31.9) |
| 30-39 | 3,174 | 8.6 (6.4-11.4) | 4,744 | 12.8 (10.2-15.9) | 8,155 | 22.0 (18.5-26.1) | 10,963 | 29.6 (25.6-34.0) | 9,988 | 27.0 (23.1-31.2) |
| 40+ | 837 | 20.3 (11.8-32.6) | 386 | 9.4 (4.3-19.3) | 556 | 13.5 (6.7-25.4) | 1,118 | 27.1 (16.9-40.5) | 1,221 | 29.6 (19.7-42.0) |
| **Education** | | | | | | | | | | |
| <High school | 496 | 10.5 (5.8-18.2) | 1,319 | 27.8 (20.1-37.2) | 1,386 | 29.2 (20.9-39.2) | 384 | 8.1 (4.0-15.7) | 1,153 | 24.3 (15.8-35.5) |
| High school diploma | 973 | 10.2 (5.9-17.1) | 2,570 | 27.0 (19.4-36.4) | 2,294 | 24.1 (17.8-31.9) | 1,245 | 13.1 (7.9-20.9) | 2,420 | 25.5 (18.2-34.5) |
| Some college | 1,451 | 11.2 (7.1-17.1) | 1,943 | 15.0 (10.8-20.4) | 3,425 | 26.4 (20.2-33.8) | 3,219 | 24.8 (18.6-32.3) | 2,921 | 22.5 (16.4-30.2) |
| College graduate | 1,921 | 5.6 (3.7-8.2) | 3,876 | 11.2 (8.6-14.5) | 7,243 | 21.0 (17.3-25.2) | 11,381 | 32.9 (28.6-37.6) | 10,135 | 29.3 (25.3-33.7) |
| **Insurance type** | | | | | | | | | | |
| Private | 1,999 | 5.4 (3.7-7.7) | 4,020 | 10.8 (8.2-14.0) | 8,831 | 23.7 (19.9-27.9) | 11,725 | 31.4 (27.3-35.9) | 10,731 | 28.8 (24.8-33.1) |
| Medicaid | 2,554 | 11.4 (8.1-15.8) | 5,081 | 22.7 (18.6-27.3) | 5,469 | 24.4 (20.1-29.3) | 4,295 | 19.2 (14.9-24.2) | 5,024 | 22.4 (18.0-27.5) |
| Other | 205 | 15.9 (5.4-38.7) | 221 | 17.2 (6.3-39) | 289 | 22.5 (10.5-41.7) | Insufficient data[2] | | 480 | 37.4 (17.3-63.0) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 1,184 | 10.1 (6.3-15.8) | 2,846 | 24.3 (18.7-30.9) | 2,837 | 24.2 (18.7-30.7) | 1,797 | 15.3 (10.8-21.3) | 3,044 | 26.0 (19.5-33.8) |
| >100% FPL | 3,401 | 7.2 (5.3-9.6) | 5,984 | 12.6 (10.2-15.6) | 11,119 | 23.5 (20.2-27.2) | 14,336 | 30.3 (26.6-34.2) | 12,491 | 26.4 (23.0-30.1) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 1,770 | 8.2 (5.9-11.3) | 4,826 | 22.4 (18.7-26.5) | 4,192 | 19.4 (16.0-23.5) | 5,076 | 23.6 (20.1-27.4) | 5,688 | 26.4 (22.5-30.7) |
| US-born | 3,092 | 7.5 (5.4-10.3) | 5,016 | 12.1 (9.4-15.5) | 10,494 | 25.4 (21.6-29.6) | 11,632 | 28.1 (24.0-32.6) | 11,113 | 26.9 (22.9-31.3) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 1,679 | 8.8 (5.6-13.4) | 3,904 | 20.4 (16.0-25.5) | 5,345 | 27.9 (22.7-33.7) | 3,212 | 16.7 (12.4-22.2) | 5,039 | 26.3 (20.9-32.4) |
| Married | 3,184 | 7.3 (5.5-9.6) | 5,939 | 13.6 (11.0-16.6) | 9,341 | 21.4 (18.1-25.0) | 13,496 | 30.9 (27.1-34.9) | 11,762 | 26.9 (23.4-30.7) |
| **WIC participation** | | | | | | | | | | |
| No | 2,617 | 6.1 (4.5-8.4) | 5,553 | 13.0 (10.4-16.2) | 9,434 | 22.1 (18.7-26.0) | 13,134 | 30.8 (26.9-34.9) | 11,914 | 27.9 (24.3-31.9) |
| Yes | 2,245 | 11.1 (7.8-15.8) | 4,260 | 21.2 (17.1-25.9) | 5,253 | 26.1 (21.5-31.2) | 3,532 | 17.5 (13.4-22.6) | 4,850 | 24.1 (19.2-29.8) |
| **Disability status** | | | | | | | | | | |
| No | 4,289 | 7.7 (5.9-9.9) | 8,764 | 15.7 (13.2-18.4) | 13,506 | 24.1 (21.1-27.4) | 15,037 | 26.9 (23.7-30.3) | 14,375 | 25.7 (22.6-20.0 |
| Yes | 573 | 8.7 (4.7-15.5) | 983 | 19.4 (9.2-23.1) | 1,083 | 16.4 (10.4-24.8) | 1,638 | 24.8 (15.9-36.4) | 2,332 | 35.3 (25.2-46.9) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Sterilization includes tubal ligation and vasectomy; [4]LARC: Long-acting reversible contraception includes intrauterine devices and implants; [5]Other hormonal contraception: includes shots, pills, patch, and vaginal ring; [6]Other non-hormonal contraception includes condoms, diaphragm, withdrawal, natural family planning including rhythm method; [7]No contraception includes people who reported not having sex

## Table 64. Prevalence of types of postpartum contraception by sociodemographic characteristics, MA PRAMS, 2021

| | Sterilization[3] | | LARC[4] | | Other hormonal contraception[5] | | Other non-hormonal contraception[6] | | No Postpartum Contraception[7] | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Characteristic** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** | **n[1]** | **Percentage (95% CI)** |
| **Total** | 5,840 | 9.0 (7.0-11.3) | 12,579 | 19.3 (16.7-22.1) | 14,825 | 22.7 (19.9-25.8) | 13,859 | 21.3 (18.6-24.2) | 18,116 | 27.8 (24.8-31.0) |
| **Race/ethnicity** | | | | | | | | | | |
| White, non-Hispanic | 4,028 | 10.4 (7.5-14.2) | 6,388 | 16.4 (12.7-20.9) | 8,993 | 23.1 (18.9-28.0) | 8,430 | 21.7 (17.7-26.2) | 11,060 | 28.4 (23.9-33.4) |
| Black, non-Hispanic | 360 | 5.8 (3.5-9.5) | 1,226 | 19.8 (15.5-25.0) | 1,454 | 23.5 (18.7-29.1) | 1,127 | 18.2 (13.6-24.0) | 2,021 | 32.7 (27.4-38.4) |
| Hispanic | 1,164 | 8.8 (6.3-12.1) | 4,106 | 31.0 (26.2-36.2) | 3,501 | 26.4 (21.9-31.5) | 2,007 | 15.2 (11.6-19.5) | 2,465 | 18.6 (14.8-23.1) |
| Asian, non-Hispanic | 108 | 2.1 (1.0-4.6) | 645 | 12.8 (9.0-17.9) | 555 | 11.0 (7.5-15.8) | 1,775 | 35.2 (29.4-41.5) | 1,958 | 38.8 (32.9-45.1) |
| Other, non-Hispanic | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | | Insufficient data[2] | |
| **Age (years)** | | | | | | | | | | |
| <20 | 0 | 0 (.-.) | 604 | 58 (38.8-75) | 257 | 24.7 (12.4-43.3) | Insufficient data[2] | | 144 | 13.9 (5.7-29.9) |
| 20-29 | 1,373 | 7.5 (4.4-12.2) | 4,203 | 22.8 (18.2-28.3) | 5,217 | 28.3 (23.0-34.3) | 3,751 | 20.4 (15.7-25.9) | 3,882 | 21.1 (16.3-26.7) |
| 30-39 | 3,798 | 8.7 (6.5-11.7) | 7,607 | 17.5 (14.4-21.2) | 8,872 | 20.4 (17.0-24.3) | 9,641 | 22.2 (18.8-26.0) | 13,497 | 31.1 (27.2-35.3) |
| 40+ | 669 | 28.6 (15-47.7) | 165 | 7.1 (3.0-15.8) | 479 | 20.5 (9.4-39.1) | 431 | 18.4 (8.6-35.3) | 593 | 25.4 (14.5-40.6) |
| **Education** | | | | | | | | | | |
| <High school | 281 | 6.4 (3.4-11.9) | 1,336 | 30.5 (21.6-41.2) | 1,090 | 24.9 (17.9-33.5) | 650 | 14.9 (9.2-23.1) | 1,020 | 23.3 (15.3-33.8) |
| High school diploma | 1,247 | 13.1 (8.0-20.8) | 2,884 | 30.3 (22.8-39) | 2,118 | 22.3 (15.6-30.6) | 1,331 | 14.0 (8.6-21.9) | 1,938 | 20.4 (13.8-29.0) |
| Some college | 1,558 | 12.2 (7.4-19.3) | 2,835 | 22.1 (16.2-29.5) | 3,148 | 24.5 (17.9-32.7) | 1,890 | 14.7 (10.3-20.6) | 3,394 | 26.5 (20.1-34.0) |
| College graduate | 2,562 | 6.9 (4.8-9.9) | 5,350 | 14.4 (11.4-18.1) | 8,086 | 21.8 (18.1-26.0) | 9,775 | 26.3 (22.5-30.6) | 11,345 | 30.6 (26.4-35.0) |
| **Insurance type** | | | | | | | | | | |
| Private | 3,682 | 9.5 (6.9-12.8) | 5,573 | 14.3 (11.3-17.9) | 8,279 | 21.3 (17.6-25.5) | 9,772 | 25.1 (21.4-29.3) | 11,603 | 29.8 (25.8-34.2) |
| Medicaid | 2,102 | 9.4 (6.5-13.5) | 5,997 | 26.9 (22.2-32.0) | 5,585 | 25.0 (20.4-30.3) | 3,211 | 14.4 (10.9-18.7) | 5,431 | 24.3 (19.7-29.6) |
| Other | Insufficient data[2] | | 351 | 18.1 (6.6-40.8) | 571 | 29.4 (15.1-49.4) | 474 | 24.4 (10.9-45.9) | 492 | 25.3 (11.2-47.7) |
| **Household poverty level** | | | | | | | | | | |
| ≤100% FPL | 1,175 | 10.3 (6.3-16.4) | 3,322 | 29.2 (22.8-36.5) | 2,653 | 23.3 (17.8-29.9) | 1,468 | 12.9 (8.6-18.9) | 2,771 | 24.3 (18.2-31.8) |
| >100% FPL | 4,568 | 9.0 (6.8-11.8) | 8,651 | 17.0 (14.2-20.3) | 10,853 | 21.3 (18.1-24.9) | 12,151 | 23.9 (20.7-27.4) | 14,670 | 28.8 (25.3-32.6) |
| **Nativity** | | | | | | | | | | |
| Non-US-born | 1,755 | 8.5 (5.8-12.2) | 5,162 | 25.0 (21.0-29.4) | 4,012 | 19.4 (16.0-23.4) | 4,260 | 20.6 (17.2-24.6) | 5,481 | 26.5 (22.6-30.8) |
| US-born | 4,084 | 9.2 (6.8-12.3) | 7,417 | 16.7 (13.5-20.4) | 10,813 | 24.3 (20.5-28.5) | 9,599 | 21.5 (18.0-25.5) | 12,634 | 28.4 (24.4-32.7) |
| **Marital status** | | | | | | | | | | |
| Unmarried | 1,787 | 8.8 (5.6-13.6) | 5,792 | 28.5 (23.0-34.8) | 5,417 | 26.7 (21.3-32.8) | 2,161 | 10.7 (7.4-15.1) | 5,133 | 25.3 (19.9-31.5) |
| Married | 4,052 | 9.0 (6.8-11.9) | 6,787 | 15.1 (12.5-18.2) | 9,408 | 20.9 (17.7-24.6) | 11,698 | 26.0 (22.6-29.8) | 12,983 | 28.9 (25.3-32.8) |
| **WIC participation** | | | | | | | | | | |
| No | 4,095 | 8.8 (6.6-11.8) | 7,414 | 16.0 (13.0-19.4) | 9,785 | 21.1 (17.7-24.9) | 11,035 | 23.8 (20.4-27.5) | 14,064 | 30.3 (26.6-34.4) |
| Yes | 1,745 | 9.3 (6.1-14.0) | 5,165 | 27.6 (22.8-33.1) | 5,040 | 27.0 (22.0-32.5) | 2,772 | 14.8 (11.1-19.6) | 3,969 | 21.2 (16.6-26.7) |
| **Disability status** | | | | | | | | | | |
| No | 4,882 | 8.5 (6.6-11.0) | 11,405 | 19.9 (17.1-23.1) | 12,874 | 22.5 (19.5-25.9) | 12,437 | 21.8 (18.9-24.9) | 15,582 | 27.3 (24.0-30.7) |
| Yes | 957 | 12.6 (6.9-21.7) | 1,018 | 13.4 (8.1-21.1) | 1,850 | 24.3 (16.5-34.2) | 1,337 | 17.5 (11.2-26.3) | 2,461 | 32.3 (24.0-41.9) |

[1]n weighted to reflect birthing population; [2]Insufficient data to report (0<n<5); [3]Sterilization includes tubal ligation and vasectomy; [4]LARC: Long-acting reversible contraception includes intrauterine devices and implants; [5]Other hormonal contraception: includes shots, pills, patch, and vaginal ring; [6]Other non-hormonal contraception includes condoms, diaphragm, withdrawal, natural family planning including rhythm method; [7]No contraception includes people who reported not having sex

| Table 65. Sample Size, Response Rates, and Total Births, MA PRAMS, 2007–2021 | | | | |
|---|---|---|---|---|
| **Data Years Presented in this Report** | **Sample Size** | **Number of Respondents** | **Weighted Response Rate** | **Total Massachusetts Resident Births[1]** |
| 2007 | 2,343 | 1,489 | 69.8 | 77,934 |
| 2008 | 2,354 | 1,508 | 71.5 | 76,969 |
| 2009 | 2,179 | 1,388 | 67.9 | 74,966 |
| 2010 | 2,448 | 1,514 | 66.1 | 72,835 |
| 2011 | 2,506 | 1,603 | 68.5 | 73,169 |
| 2012 (Feb. 1 – Dec. 31) | 2,495 | 1,539 | 67.5 | 66,853 |
| 2013 | 2,585 | 1,473 | 62.0 | 71,618 |
| 2014 | 2,847 | 1,546 | 60.0 | 71,867 |
| 2015 | 2,328 | 1,330 | 62.5 | 71,484 |
| 2016 | 2,403 | 1,311 | 59.9 | 71,319 |
| 2017 | 2,442 | 1,423 | 61.9 | 70,704 |
| 2018 | 2,450 | 1,436 | 62.4 | 67,838 |
| 2019 | 2,947 | 1,697 | 61.2 | 69,117 |
| 2020 | 2,492 | 1,400 | 59.6 | 66,442 |
| 2021 | 2,501 | 1,321 | 57.0 | 69,127 |
| Source: 2007–2021 Massachusetts PRAMS, Division of Maternal and Child Health Research and Analysis, Massachusetts Department of Public Health; Note: Estimated PRAMS coverage is 99.8% | | | | |
| [1]Massachusetts Births, 2007–2021, Registry of Vital Records and Statistics, Massachusetts Department of Public Health. The 2021 total births are based on preliminary 2021 data as of June 1, 2022 | | | | |

| Table 66. Overall characteristics by year for respondents[1], MA PRAMS 2019-2021 | | | | | | |
|---|---|---|---|---|---|---|
| **Characteristic** | **2019** | | **2020** | | **2021** | |
| | **n[2]** | **Percentage (95% CI)** | **n[2]** | **Percentage (95% CI)** | **n[2]** | **Percentage (95% CI)** |
| **Total** | 66,685 | | 64,121 | | 66,660 | |
| **Race/ethnicity** | | | | | | |
| White, non-Hispanic | 39,780 | 60.4 (59.3-61.4) | 36,808 | 58.2 (57.1-59.3) | 39,501 | 60.7 (59.7-61.6) |
| Black, non-Hispanic | 6,686 | 10.1 (9.5-10.9) | 6,399 | 10.1 (9.5-10.7) | 6,523 | 10.0 (9.5-10.6) |
| Hispanic | 13,028 | 19.8 (19.1-20.5) | 13,623 | 21.5 (20.8-22.3) | 13,710 | 21.1 (20.5-21.6) |
| Asian, non-Hispanic | 5,778 | 8.8 (8.3-9.2) | 6,016 | 9.5 (9.1-10.0) | 5,040 | 7.7 (7.3-8.2) |
| Other, non-Hispanic | 627 | 1.0 (0.7-1.4) | 407 | 0.6 (0.4-1.0) | 339 | 0.5 (0.3-0.9) |
| **Age (years)** | | | | | | |
| <20 | 1,041 | 1.6 (1.0-2.3) | 1,449 | 2.3 (1.5-3.4) | 1,107 | 1.7 (1.1-2.4) |
| 20-29 | 21,349 | 32 (29.3-34.8) | 20,946 | 32.7 (29.6-35.9) | 19,080 | 28.6 (25.8-31.7) |
| 30-39 | 40,757 | 61.1 (58.2-64.0) | 37,561 | 58.6 (55.2-61.9) | 44,036 | 66.1 (62.9-69.1) |
| 40+ | 3,538 | 5.3 (4.1-6.9) | 4,165 | 6.5 (5.1-8.3) | 2,437 | 3.7 (2.6-5.1) |
| **Education** | | | | | | |
| <High school | 5,093 | 7.9 (6.6-9.3) | 4,957 | 7.9 (6.5-9.5) | 4,730 | 7.3 (6.0-8.7) |
| High school diploma | 9,759 | 15 (13.1-17.2) | 9,920 | 15.8 (13.4-18.5) | 9,837 | 15.1 (12.8-17.7) |
| Some college | 15,874 | 24.5 (21.9-27.2) | 13,167 | 21.0 (18.2-24.0) | 13,087 | 20.1 (17.4-23.1) |
| College graduate | 34,151 | 52.6 (49.7-55.6) | 34,775 | 55.4 (52.1-58.6) | 37,571 | 57.6 (54.4-60.8) |
| **Insurance type** | | | | | | |
| Private | 39,705 | 61.2 (58.4-63.9) | 37,472 | 60.4 (57.3-63.5) | 39,435 | 61.1 (57.9-64.2) |
| Medicaid/MassHealth | 23,421 | 36.1 (33.4-38.8) | 23,214 | 37.4 (34.4-40.5) | 23,142 | 35.9 (32.9-39.0) |
| All other | 1,784 | 2.7 (1.9-3.9) | 1,314 | 2.1 (1.4-3.3) | 1,942 | 3.0 (2.0-4.5) |
| **Household poverty level** | | | | | | |
| ≤100% FPL | 13,186 | 20.7 (18.6-23) | 11,828 | 19.9 (17.5-22.6) | 11,715 | 18.6 (16.2-21.2) |
| >100% FPL | 50,461 | 79.3 (77.0-81.4) | 47,541 | 80.1 (77.4-82.5) | 51,318 | 81.4 (78.8-83.8) |
| **Nativity** | | | | | | |
| Non-US-born | 19,409 | 29.1 (27.1-31.2) | 22,156 | 34.6 (32.1-37.1) | 21,229 | 31.8 (29.5-34.3) |
| US-born | 47,251 | 70.9 (68.8-72.9) | 41,965 | 65.4 (62.9-67.9) | 45,431 | 68.2 (65.7-70.5) |
| **Marital status** | | | | | | |
| Unmarried | 21,298 | 31.9 (29.3-34.7) | 19,758 | 30.8 (27.8-34.0) | 20,975 | 31.5 (28.3-34.8) |
| Married | 45,387 | 68.1 (65.3-70.7) | 44,363 | 69.2 (66.0-72.2) | 45,685 | 68.5 (65.2-71.7) |
| **WIC participation** | | | | | | |
| No | 45,345 | 68.8 (66.2-71.2) | 42,838 | 67.2 (64.2-70.1) | 46,974 | 70.7 (67.9-73.4) |
| Yes | 20,592 | 31.2 (28.8-33.8) | 20,876 | 32.8 (29.9-35.8) | 19,453 | 29.3 (26.6-32.1) |
| **Disability status** | | | | | | |
| No | 59,058 | 89.6 (87.7-91.3) | 56,245 | 89.2 (86.8-91.3) | 57,959 | 88.3 (86.0-90.3) |
| Yes | 6,830 | 10.4 (8.7-12.3) | 6,786 | 10.8 (8.7-13.2) | 7,663 | 11.7 (9.7-14.0) |

[1]Respondents are sampled from resident births who delivered in-state; [2]n weighted to reflect birthing population;
[3]Insufficient data to report (0<n<5)

| Table 67. Details of Sample Characteristics, MA PRAMS 2019 | | | | |
|---|---|---|---|---|
| | 2019 | | | |
| **Characteristics** | **Number of respondents** | **Weighted N** | **PRAMS percent (%)** | **Statewide percent from MA birth certificate (%)** |
| **Total** | 1,697 | 66,685 | | |
| **Race/ethnicity[1]** | | | | |
| White, non-Hispanic | 559 | 39,780 | 60.4 | 57.1 |
| Black, non-Hispanic | 374 | 6,686 | 10.1 | 10.4 |
| Hispanic | 418 | 13,028 | 19.8 | 20.4 |
| Asian, non-Hispanic | 305 | 5,778 | 8.8 | 9.3 |
| Other, non-Hispanic | 28 | 627 | 1.0 | 1.2 |
| **Age (years)[1]** | | | | |
| <20 | 29 | 1,041 | 1.6 | 2.3 |
| 20-29 | 571 | 21,349 | 32.0 | 33.1 |
| 30-39 | 1,001 | 40,757 | 61.1 | 59.6 |
| 40+ | 96 | 3,538 | 5.3 | 5.0 |
| **Education[1]** | | | | |
| <High school | 155 | 5,093 | 7.9 | 8.0 |
| High school diploma | 272 | 9,759 | 15.0 | 15.7 |
| Some college | 436 | 15,874 | 24.5 | 23.6 |
| College graduate | 798 | 34,151 | 52.6 | 50.0 |
| **Insurance type[1]** | | | | |
| Private | 897 | 39,705 | 61.2 | 63.8 |
| Medicaid | 689 | 23,421 | 36.1 | 33.1 |
| Other | 53 | 1,784 | 2.7 | 3.0 |
| **Household poverty level[2]** | | | | |
| ≤100% FPL | 396 | 13,186 | 20.7 | - |
| >100% FPL | 1,195 | 50,461 | 79.3 | - |
| **Nativity[1]** | | | | |
| Non-US-born | 760 | 19,409 | 29.1 | 33.3 |
| US-born | 936 | 47,251 | 70.9 | 66.6 |
| **Marital status[1]** | | | | |
| Unmarried | 574 | 21,298 | 31.9 | 32.7 |
| Married | 1,123 | 45,387 | 68.1 | 67.3 |
| **WIC participation[1]** | | | | |
| No | 1,042 | 45,345 | 68.8 | 71.1 |
| Yes | 634 | 20,592 | 31.2 | 28.9 |
| **Disability status[2]** | | | | |
| No | 1,483 | 59,058 | 89.6 | - |
| Yes | 192 | 6,830 | 10.4 | - |
| **Preferred Language[1]** | | | | |
| English | 1,422 | 56,563 | 88.7 | 86.3 |
| Spanish | 160 | 4,855 | 7.6 | 6.3 |
| Other | 84 | 2,371 | 3.7 | 7.5 |
| **Parity[1]** | | | | |
| No previous live birth | 736 | 29,113 | 44.1 | 44.3 |
| Previous live birth | 935 | 36,848 | 55.9 | 55.7 |
| [1]variable from MA certificate of live birth; [2]variable from PRAMS. | | | | |

| Table 68. Details of Sample Characteristics, MA PRAMS 2020 | | | | |
|---|---|---|---|---|
| | 2020 | | | |
| **Characteristics** | **Number of respondents** | **Weighted N** | **PRAMS percent (%)** | **Statewide percent from MA birth certificate (%)** |
| **Total** | 1,400 | 64,121 | | |
| **Race/ethnicity[1]** | | | | |
| White, non-Hispanic | 354 | 36,808 | 58.2 | 56.2 |
| Black, non-Hispanic | 355 | 6,399 | 10.1 | 10.3 |
| Hispanic | 372 | 13,623 | 21.5 | 21.0 |
| Asian, non-Hispanic | 294 | 6,016 | 9.5 | 9.7 |
| Other, non-Hispanic | 17 | 407 | 9.5 | 1.2 |
| **Age (years) [1]** | | | | |
| <20 | 29 | 1,449 | 2.3 | 2.1 |
| 20-29 | 428 | 20,946 | 32.7 | 31.9 |
| 30-39 | 842 | 37,561 | 58.6 | 60.9 |
| 40+ | 101 | 4,165 | 6.5 | 5.2 |
| **Education[1]** | | | | |
| <High school | 135 | 4,957 | 7.9 | 7.8 |
| High school diploma | 220 | 9,920 | 15.8 | 16.5 |
| Some college | 309 | 13,167 | 21.0 | 23.4 |
| College graduate | 709 | 34,775 | 55.4 | 49.9 |
| **Insurance type[1]** | | | | |
| Private | 714 | 37,472 | 60.4 | 64.2 |
| Medicaid | 598 | 23,214 | 37.4 | 33.3 |
| Other | 38 | 1,314 | 2.1 | 2.5 |
| **Household poverty level[2]** | | | | |
| ≤100% FPL | 315 | 11,828 | 19.9 | - |
| >100% FPL | 961 | 47,541 | 80.1 | - |
| **Nativity[1]** | | | | |
| Non-US-born | 758 | 22,156 | 34.6 | 31.0 |
| US-born | 642 | 41,965 | 65.4 | 69.0 |
| **Marital status[1]** | | | | |
| Unmarried | 442 | 19,758 | 30.8 | 33.6 |
| Married | 958 | 44,363 | 69.2 | 66.4 |
| **WIC participation[1]** | | | | |
| No | 842 | 42,838 | 67.2 | 71.6 |
| Yes | 546 | 20,876 | 32.8 | 28.4 |
| **Disability status[2]** | | | | |
| No | 1,213 | 56,245 | 89.2 | - |
| Yes | 154 | 6,786 | 10.8 | - |
| **Preferred Language[1]** | | | | |
| English | 1151 | 54296 | 88.3 | 86.3 |
| Spanish | 143 | 5090 | 8.3 | 6.3 |
| Other | 76 | 2110 | 3.4 | 7.4 |
| **Parity[1]** | | | | |
| No previous live birth | 623 | 29,160 | 45.9 | 44.9 |
| Previous live birth | 756 | 34,367 | 54.1 | 55.1 |

[1]variable from MA certificate of live birth; [2]variable from PRAMS.

| Table 69. Details of Sample Characteristics, MA PRAMS 2021 | | | | |
|---|---|---|---|---|
| | 2021 | | | |
| **Characteristics** | **Number of respondents** | **Weighted N** | **PRAMS percent (%)** | **Statewide percent from MA birth certificate (%)** |
| **Total** | 1,321 | 66,660 | | |
| **Race/ethnicity[1]** | | | | |
| White, non-Hispanic | 376 | 39,501 | 60.7 | 57.7 |
| Black, non-Hispanic | 313 | 6,523 | 10.0 | 10.1 |
| Hispanic | 359 | 13,710 | 21.1 | 20.9 |
| Asian, non-Hispanic | 248 | 5,040 | 7.7 | 8.8 |
| Other, non-Hispanic | 14 | 339 | 0.5 | 1.1 |
| **Age (years) [1]** | | | | |
| <20 | 32 | 1,107 | 1.7 | 1.9 |
| 20-29 | 397 | 19,080 | 28.6 | 30.6 |
| 30-39 | 833 | 44,036 | 66.1 | 62.4 |
| 40+ | 59 | 2,437 | 3.7 | 5.2 |
| **Education[1]** | | | | |
| <High school | 130 | 4,730 | 7.3 | 7.2 |
| High school diploma | 186 | 9,837 | 15.1 | 15.6 |
| Some college | 282 | 13,087 | 20.1 | 22.6 |
| College graduate | 700 | 37,571 | 57.6 | 52.3 |
| **Insurance type[1]** | | | | |
| Private | 707 | 39,435 | 61.1 | 67.0 |
| Medicaid | 530 | 23,142 | 35.9 | 30.5 |
| Other | 37 | 1,942 | 3.0 | 2.5 |
| **Household poverty level[2]** | | | | |
| ≤100% FPL | 275 | 11,715 | 18.6 | - |
| >100% FPL | 949 | 51,318 | 81.4 | - |
| **Nativity[1]** | | | | |
| Non-US-born | 665 | 21,229 | 31.8 | 29.4 |
| US-born | 656 | 45,431 | 68.2 | 70.6 |
| **Marital status[1]** | | | | |
| Unmarried | 425 | 20,975 | 31.5 | 33.3 |
| Married | 896 | 45,685 | 68.5 | 66.7 |
| **WIC participation[1]** | | | | |
| No | 844 | 46,974 | 70.7 | 73.1 |
| Yes | 469 | 19,453 | 29.3 | 26.9 |
| **Disability status[2]** | | | | |
| No | 1,123 | 57,959 | 88.3 | - |
| Yes | 169 | 7,663 | 11.7 | - |
| **Preferred Language[1]** | | | | |
| English | 1,081 | 55,205 | 88.7 | 87.2 |
| Spanish | 148 | 5,290 | 8.5 | 5.9 |
| Other | 51 | 1,736 | 2.8 | 7.0 |
| **Parity[1]** | | | | |
| No previous live birth | 581 | 29,347 | 44.5 | 43.8 |
| Previous live birth | 722 | 36,610 | 55.5 | 56.2 |

[1]variable from MA certificate of live birth; [2]variable from PRAMS.

Massachusetts Title V Performance Measures for Selected Title V Priorities, Healthy People 2030 Objectives, and MA PRAMS 2019-2021

| Title V[1] Performance Measures (PM) | Healthy People 2030[2] | | PRAMS prevalence | | | |
|---|---|---|---|---|---|---|
| | Objective | Target | Survey Question | 2019 | 2020 | 2021 |
| **EFFECTS OF RACISM** | | | | | | |
| State measure related to eliminating institutional and structural racism in internal DPH programs, policies, and practices | 2030-No Objective[2] | | Stress due to racism | 5.6%[3] | 7.3%[3] | 8.3%[3] |
| | | | Felt upset due to racism | 6.4%[3] | 7.5%[3] | 8.3%[3] |
| | | | Physical symptoms due to racism | 2.6%[3] | 3.5%[3] | 3.7%[3] |
| **EMOTIONAL WELLNESS** | | | | | | |
| No Title V PM | 2030-No Objective[2] | | Experienced depressive symptoms (always/often) in the postpartum period | 10.2%[3] | 10.0%[3] | 10.4%[3] |
| Increase the percent of birthing people who report being screened for depression by a health care worker during postpartum visits | Increase the proportion of birthing people who get screened for postpartum depression | In developmental phase | Had screening for depression after pregnancy | 87.8%[3] | 84.2%[3] | 88.3%[3] |
| **SUBSTANCE USE** | | | | | | |
| No Title V PM | Increase abstinence from cigarette smoking among pregnant people | 2030-95.7% | Abstained from cigarette smoking in the three months prior to pregnancy | 88.4%[3] | 90.0%[3] | 91.8%[3] |
| Decrease the number of people who | Increase abstinence from | 2030-95.7% | Reported abstaining from cigarette | 95.5%[3] | 96.1%[3] | 96.3%[3] |

Massachusetts Title V Performance Measures for Selected Title V Priorities, Healthy People 2030 Objectives, and MA PRAMS 2019-2021

| Title V[1] | Healthy People 2030[2] | | PRAMS prevalence | | | |
|---|---|---|---|---|---|---|
| **Performance Measures (PM)** | **Objective** | **Target** | **Survey Question** | **2019** | **2020** | **2021** |
| smoke during pregnancy (NPM 14a- but MA did not select this) | cigarette smoking among pregnant people | | smoking in the last three months of pregnancy | | | |
| No Title V PM | 2030-No Objective[2] | | Reported alcohol consumption in the three months prior to pregnancy | 65.0%[3] | 64.4%[3] | 65.2%[3] |
| **BREASTFEEDING** | | | | | | |
| Increase the percent of infants who are ever breastfed (NPM 4a)[1] | 2030-No Objective[2] | | Breastfed ever | 91.8% | 91.0% | 91.3% |
| **SAFE SLEEP** | | | | | | |
| Increase the percent of infants placed to sleep on their backs (supine) (NPM 5)[1] | Increase the proportion of infants who are put to sleep on their backs | 2030- 88.9% | Placed infant to sleep on back | 87.5%[3] | 85.5%[3] | 85.7%[3] |
| **ORAL HEALTH** | | | | | | |
| Increase the percent of birthing people who have a dental visit during pregnancy (NPM 13)[1] | 2030-No Objective[2] | | Had teeth cleaned by a dentist or dental hygienist during pregnancy | 58.8%[3] | 51.1%[3] | 52.7%[3] |
| **PRECONCEPTION HEALTH** | | | | | | |
| No Title V PM | Reduce the proportion of unintended (mistimed or | 2030-36.5% | Didn't want to be pregnant then or any time later | 20.9%[3] | 17.0%[3] | 17.2%[3] |

Massachusetts Title V Performance Measures for Selected Title V Priorities, Healthy People 2030 Objectives, and MA PRAMS 2019-2021

| Title V[1] Performance Measures (PM) | Healthy People 2030[2] | | PRAMS prevalence | | | |
|---|---|---|---|---|---|---|
| | Objective | Target | Survey Question | 2019 | 2020 | 2021 |
| | unwanted) pregnancies | | | | | |
| No Title V PM | Increase the proportion of people able to give birth of childbearing age who get enough folic acid | 86.2% | Report of daily multivitamin, prenatal vitamin, or folic acid vitamin intake | 47.5% | 49.2% | 52.1% |
| **PRENATAL CARE** | | | | | | |
| No Title V PM | Increase the proportion of pregnant people who receive 1 dose of Tdap vaccine during pregnancy | In developmental phase | Reported receiving Tdap during pregnancy | 89.6% | 89.2% | 89.7% |
| **POSTPARTUM HEALTH/ BEHAVIOR** | | | | | | |
| No Title V PM | Increase the proportion of those at risk for unintended pregnancy who use effective birth control | 2030-65.1% | Reported using a most effective or moderately effective contraception method postpartum[4] | 51.5% | 47.0% | 50.8% |

[1]This Title V Performance Measure is both a State Performance Measure and a National Performance Measure (NPM in parenthesis).

[2]Where a Healthy People Objective exists, the objective, year and target are presented. *No Objective* indicates that this topic has no directly comparable Healthy People Objective. *No Target* indicates that this target has yet to be established.

[3]Significant variation in prevalence across race and ethnic categories.

[4]Includes sterilization, LARC (hormonal implant, IUD), hormonal injection, patch, and oral contraceptives.

## PRAMS Sampling Methodology

The MA PRAMS is an ongoing, population-based surveillance system designed to identify and monitor selected attitudes, experiences and behaviors that occur before, during and after pregnancy. The PRAMS survey consists of three types of questions. All surveys include a required set of questions ("Core" questions), which allow for multi-state analyses. Each state can select additional questions from a CDC-approved-questions list ("Standard" questions) or can create questions tailored to meet its needs ("State-developed" questions). The MA PRAMS survey is available on the MA **PRAMS website**. The survey was administered in English and Spanish only.

PRAMS survey participants were sampled from a frame of eligible birth certificates which included all live-born infants of Massachusetts resident birthing people, delivered in the state, for whom a birth certificate was available. Based on CDC's PRAMS protocol, stillbirths, fetal deaths, induced abortions, and multiple births with quadruplets or more were excluded from the sampling frame.

Since 2007, Massachusetts has used a stratified sampling methodology, sampling disproportionately from four racial and Hispanic ethnic groups: (1) White non-Hispanic; (2) Black non-Hispanic; (3) Hispanic; and (4) Other, non-Hispanic. All but White non-Hispanic birthing people were oversampled to improve precision in examining disparities by race and ethnicity. For oversampling purposes, the category of Other, non-Hispanic includes all racial and ethnic groups besides White, Black, and Hispanic. Similar to previous reports, in the 2019-2021 report, Massachusetts separates Asian non-Hispanics from the "Other, non-Hispanic" category for analytical purposes. Therefore, the "Other, non-Hispanic" group has a small sample size which resulted in having prevalence estimates with wider 95% confidence limits (95% CL) and the findings in this group should be interpreted with caution. Disability status was ascertained by participants' response to the PRAMS question: "Are you limited in any way in any activities because of physical, mental, or emotional problems?" Additional demographic information was obtained from the birth file, including the birthing person's education, age, marital status, parity, and nativity.

About three percent of Massachusetts birthing people with a live birth in our study period were sampled and received up to three mailed paper surveys. Birthing people who did not respond to the survey after the third mailing were contacted by telephone. The survey data were weighted using selected demographics to account for non-response and adjusted for sampling probabilities and coverage to represent the Massachusetts birth population in 2019-2021.

Analyses for the MA PRAMS 2019-2021 report accounted for the stratified sampling method and included the final survey weights. SAS v9.4 and SUDAAN v11.0 were used to calculate prevalence and bivariate statistics. The 95% CLs are included whenever possible in this report. When comparing estimates, if the 95% CLs do not overlap, we consider that there is a statistically significant difference.

## Limitations

The data presented in this report are generalizable only to pregnancies resulting in a live birth of singletons or multiples of fewer than four, to Massachusetts residents who gave birth in the state.

The PRAMS survey is currently only administered in English and Spanish. This might present a limitation in collecting data from birthing people with limited proficiency in either of these languages.

Because PRAMS is based on self-reported information, there is the potential for misclassification error. Bias may occur if some groups of birthing people recall experiences more or less accurately than others.

Income data were collected; however, about seven percent of respondents declined to report income, and analyses involving household poverty could not include these respondents. In general, income data tend to be underreported on surveys.

In addition, the PRAMS survey did not collect information on gender identity or sexual orientation.

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