



Telling
the story
of Michigan's
mothers
and
babies.



**2019 Birth Year
Maternal and Infant Health Summary Tables**

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Gretchen Whitmer
Governor, State of Michigan

Elizabeth Hertel
Director, Michigan Department of Health and Human Services

Joneigh S. Khaldun, MD, MPH, FACEP
Chief Medical Executive
Chief Deputy Director for Health
Michigan Department of Health and Human Services

Sarah Lyon-Callo, MS, PhD
State Epidemiologist and Director
Bureau of Epidemiology and Population Health
Michigan Department of Health and Human Services

Patricia McKane, DVM, MPH
State MCH Epidemiologist and Director
Lifecourse Epidemiology and Genomics Division
Michigan Department of Health and Human Services

Chris Fussman, MS
Manager, Maternal and Child Health Epidemiology Section
Michigan Department of Health and Human Services

PRAMS Staff

Peterson Haak - PRAMS Project Coordinator
Jill Hardy - PRAMS Operations Coordinator
Hannah Sauter - PRAMS Survey Operations Associate
Mei You - Sampling Statistician
Chris Fussman - PRAMS Principal Investigator

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Introduction to the 2019 MI PRAMS Annual Tables

Michigan's Pregnancy Risk Assessment Monitoring System (MI PRAMS) is an annual population-based survey of new mothers, assessing behaviors and experiences around the time of pregnancy. MI PRAMS is a collaboration between Centers for Disease Control and Prevention (CDC) and the Michigan Department of Health and Human Services (MDHHS). MI PRAMS operations are housed within the Maternal and Child Health Epidemiology Section, a part of the Lifecourse Epidemiology and Genomics Division.

MI PRAMS utilizes a mixed-mode methodology in order to gather information from women who were selected to participate in the survey. This combination mail/telephone survey methodology is used in order to maximize response rates. Data collection for the 2019 birth year was conducted by the Michigan Department of Health and Human Services (mail) and the Bloustein Center for Survey Research at Rutgers University (phone).

MI PRAMS surveys approximately one to two percent of resident mothers who have delivered a live born infant in Michigan within each calendar year. MI PRAMS mothers are selected using a stratified random sample of live birth certificates. In 2019, the sample was selected from within the following strata:

Stratum 1: Low birthweight infants, entire state

Stratum 2: Black mothers, normal birthweight infants, southeast Michigan [St. Clair, Macomb, Oakland, Livingston, Washtenaw, Wayne, and Monroe counties]

Stratum 3: All other mothers, normal birthweight infants, southeast Michigan

Stratum 4: Black mothers, normal birthweight infants, all non-southeast counties

Stratum 5: All other mothers, normal birthweight infants, all non-southeast counties

In 2019, 2,636 women were selected for MI PRAMS and 1,392 completed the survey, for an unweighted response rate of 52.8 percent. Adjusting for differing probabilities of selection within each stratum, the weighted response rate was 56.0 percent. Survey results from these 1,392 respondents were weighted to represent the approximately 104,517 pregnancies resulting in live births in 2019. It is worth noting that - due to multiple births - the number of *pregnancies* each year will be lower than the overall number of *live born infants*. Thus, MI PRAMS is technically representative of the population of new mothers, a number that is nearly equal to the number of new infants.

The 2019 birth year was the fourth year of Phase 8 of the PRAMS survey. The Phase 7 version of PRAMS was used from 2012 through 2015. The prior phase, Phase 6, ran from 2009 through 2011. Many questions in the survey are asked with identical wording across survey phases, so some comparisons can be made over time. There are a few topics where wording changes across survey phases making direct comparison over time problematic or impossible. These include pre-pregnancy and postpartum depression, pregnancy intention, infant cosleeping, and pre-pregnancy income. A multi-phase topic map can be found on the MI PRAMS reports webpage at: Michigan.gov/PRAMS

New survey topics covered in Phase 8 include marijuana and prescription opioid usage; e-cigarette and hookah usage; breastfeeding: reasons why not breastfeeding, information sources, breast pumps; access to basic needs; infant care givers; adverse childhood experiences (ACES); maternal resilience; and maternal sleep. A comparison of topics between this report and the prior year's report can be found in the Appendix.

**Table 1. Distribution of selected maternal characteristics,
MI PRAMS, 2019**

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Maternal Age				
Total	1,392	104,517	100.0	
<18 Years	19	635	0.6	(0.4-1.0)
18-19 Years	46	3,563	3.4	(2.3-5.0)
20-24 Years	278	20,269	19.4	(16.8-22.3)
25-29 Years	446	35,253	33.7	(30.7-36.9)
30-34 Years	376	29,483	28.2	(25.4-31.2)
35-39 Years	179	12,024	11.5	(9.7-13.6)
40+ Years	48	3,291	3.1	(2.2-4.4)
Race/Ethnicity				
Total	1,385	103,890	100.0	
White, non-Hispanic	649	68,685	66.1	(63.6-68.6)
Black, non-Hispanic	580	19,605	18.9	(18.2-19.5)
Hispanic	75	7,869	7.6	(5.9-9.7)
Asian/Pacific Islander, non-Hispanic	28	2,669	2.6	(1.7-3.8)
Other, non-Hispanic	53	5,061	4.9	(3.6-6.6)
Education				
Total	1,381	103,854	100.0	
<High School	155	10,894	10.5	(8.6-12.8)
HS Grad/GED	368	25,855	24.9	(22.1-27.9)
Some College	433	30,063	28.9	(26.1-31.9)
College Degree+	425	37,042	35.7	(32.7-38.7)
Pre-Pregnancy Insurance Status				
Total	1,344	100,724	100.0	
Uninsured	88	7,025	7.0	(5.4-9.0)
Medicaid/Public	488	30,391	30.2	(27.3-33.3)
Private	768	63,309	62.9	(59.6-66.0)
Marital Status				
Total	1,392	104,517	100.0	
Married	721	62,402	59.7	(56.6-62.8)
Other	671	42,115	40.3	(37.2-43.4)
Parity				
Total	1,392	104,517	100.0	
No Prior Live Births	510	40,962	39.2	(36.0-42.4)
1	424	31,792	30.4	(27.5-33.5)
2+	458	31,763	30.4	(27.5-33.4)
Last Year's Household Income				
Total	1,263	97,546	100.0	
<\$16,000	301	18,408	18.9	(16.4-21.6)
\$16,001-\$24,000	182	12,669	13.0	(10.8-15.5)
\$24,001-\$40,000	188	13,596	13.9	(11.7-16.5)
\$40,001-\$60,000	159	13,074	13.4	(11.2-15.9)
\$60,001+	433	39,800	40.8	(37.6-44.1)

Table 2. Distribution of pre-pregnancy maternal body mass index categories, MI PRAMS, 2019

Body Mass Index (BMI)	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
BMI Category				
Underweight	39	2,812	2.7	(1.8-4.1)
Normal weight	570	44,477	42.6	(39.4-45.8)
Overweight	344	27,114	25.9	(23.1-29.0)
Obese	439	30,114	28.8	(26.0-31.8)

Based on IOM 2009 weight categories. Weight categories are calculated using pre-pregnancy body mass index (BMI).

BMI formula = (Weight in pounds * 0.45) / [(Height in inches * 0.025)²]

Underweight BMI = <18.5, Normal weight BMI = 18.5-24.9, Overweight BMI = 25-29.9, Obese BMI = >30.

Reference: National Research Council. (2009).
Press.

. National Academies

Table 3. Prevalence of pre-pregnancy underweight BMI by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	39	2,812	2.7	(1.8-4.1)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	24	2,102	3.8**	(2.3-6.3)
30+ Years	11	487	1.1**	(0.5-2.3)
Race/Ethnicity				
White, non-Hispanic	18	1,690	2.5	(1.4-4.4)
Black, non-Hispanic	16	597	3.0	(1.8-5.0)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	15	1,482	13.6**	(7.3-23.9)
HS Grad/GED	11	551	2.1**	(0.9-5.0)
Some College	7	459	1.5**	(0.6-3.6)
College Degree+	6	320	0.9**	(0.3-2.3)
Pre-Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	23	1,971	6.5	(3.8-10.8)
Private	11	596	0.9**	(0.5-1.9)
Marital Status				
Married	13	748	1.2**	(0.6-2.4)
Other	26	2,064	4.9	(2.9-8.1)
Parity				
No previous live birth	18	1,173	2.9**	(1.6-5.2)
1	*	*	*	*
2+	16	1,430	4.5**	(2.4-8.4)
Last Year's Household Income				
<\$16,000	13	955	5.2**	(2.5-10.5)
\$16,001-\$24,000	*	*	*	*
\$24,001-\$40,000	9	826	6.1**	(2.6-13.5)
\$40,001-\$60,000	*	*	*	*
\$60,001+	6	402	1.0**	(0.4-2.6)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 4. Prevalence of pre-pregnancy normal weight BMI by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	570	44,477	42.6	(39.4-45.8)
Maternal Age				
<20 Years	38	2,653	63.2	(46.3-77.4)
20-29 Years	293	22,305	40.2	(35.8-44.7)
30+ Years	239	19,519	43.6	(38.9-48.4)
Race/Ethnicity				
White, non-Hispanic	297	30,678	44.7	(40.4-49.0)
Black, non-Hispanic	195	6,606	33.7	(29.8-37.9)
Hispanic	31	3,030	38.5	(26.7-51.8)
Asian/Pacific Islander, non-Hispanic	17	1,585	59.4	(39.3-76.8)
Other, non-Hispanic	26	2,210	43.7	(29.0-59.5)
Education				
<High School	59	3,256	29.9	(21.5-39.9)
HS Grad/GED	143	9,883	38.2	(31.7-45.2)
Some College	163	12,834	42.7	(37.0-48.6)
College Degree+	201	18,351	49.5	(44.2-54.9)
Pre-Pregnancy Insurance Status				
Uninsured	43	4,062	57.8	(44.8-69.8)
Medicaid/Public	175	10,479	34.5	(29.0-40.4)
Private	326	27,704	43.8	(39.7-47.9)
Marital Status				
Married	315	28,851	46.2	(42.1-50.5)
Other	255	15,626	37.1	(32.3-42.2)
Parity				
No previous live birth	239	18,970	46.3	(41.1-51.6)
1	166	13,898	43.7	(38.0-49.6)
2+	165	11,608	36.5	(31.1-42.3)
Last Year's Household Income				
<\$16,000	126	7,011	38.1	(31.1-45.6)
\$16,001-\$24,000	73	5,251	41.4	(32.2-51.4)
\$24,001-\$40,000	61	4,526	33.3	(25.2-42.6)
\$40,001-\$60,000	46	3,998	30.6	(22.6-40.0)
\$60,001+	207	20,037	50.3	(45.1-55.5)

Table 5. Prevalence of pre-pregnancy overweight BMI by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	344	27,114	25.9	(23.1-29.0)
Maternal Age				
<20 Years	11	498	11.9**	(4.7-26.6)
20-29 Years	190	15,678	28.2	(24.2-32.6)
30+ Years	143	10,939	24.4	(20.5-28.8)
Race/Ethnicity				
White, non-Hispanic	165	17,893	26.1	(22.4-30.1)
Black, non-Hispanic	131	4,179	21.3	(18.1-25.0)
Hispanic	15	1,620	20.6	(11.6-33.9)
Asian/Pacific Islander, non-Hispanic	9	866	32.4	(16.9-53.2)
Other, non-Hispanic	22	2,405	47.5	(32.3-63.2)
Education				
<High School	32	2,965	27.2	(18.4-38.3)
HS Grad/GED	84	6,982	27.0	(21.0-34.0)
Some College	108	6,795	22.6	(18.2-27.6)
College Degree+	117	10,022	27.1	(22.6-32.0)
Pre-Pregnancy Insurance Status				
Uninsured	22	1,679	23.9	(14.5-36.7)
Medicaid/Public	111	7,571	24.9	(19.9-30.7)
Private	201	17,316	27.4	(23.7-31.3)
Marital Status				
Married	195	16,402	26.3	(22.8-30.1)
Other	149	10,712	25.4	(21.0-30.4)
Parity				
No previous live birth	130	11,300	27.6	(23.0-32.6)
1	113	8,363	26.3	(21.4-31.8)
2+	101	7,451	23.5	(18.8-28.9)
Last Year's Household Income				
<\$16,000	58	4,423	24.0	(17.7-31.8)
\$16,001-\$24,000	45	3,276	25.9	(18.1-35.4)
\$24,001-\$40,000	50	3,866	28.4	(20.6-37.9)
\$40,001-\$60,000	53	4,660	35.6	(27.2-45.1)
\$60,001+	111	9,787	24.6	(20.4-29.3)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 6. Prevalence of pre-pregnancy obese BMI by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	439	30,114	28.8	(26.0-31.8)
Maternal Age				
<20 Years	12	824	19.6**	(9.5-36.2)
20-29 Years	217	15,437	27.8	(23.9-32.0)
30+ Years	210	13,853	30.9	(26.7-35.4)
Race/Ethnicity				
White, non-Hispanic	169	18,424	26.8	(23.2-30.8)
Black, non-Hispanic	238	8,223	41.9	(37.8-46.2)
Hispanic	27	2,984	37.9	(26.2-51.2)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	49	3,191	29.3	(20.8-39.6)
HS Grad/GED	130	8,439	32.6	(26.6-39.4)
Some College	155	9,975	33.2	(28.0-38.8)
College Degree+	101	8,349	22.5	(18.5-27.2)
Pre-Pregnancy Insurance Status				
Uninsured	20	1,091	15.5	(8.9-25.6)
Medicaid/Public	179	10,369	34.1	(28.8-39.9)
Private	230	17,693	27.9	(24.4-31.8)
Marital Status				
Married	198	16,402	26.3	(22.8-30.1)
Other	241	13,712	32.6	(28.1-37.4)
Parity				
No previous live birth	123	9,519	23.2	(19.1-28.0)
1	140	9,322	29.3	(24.4-34.8)
2+	176	11,273	35.5	(30.2-41.2)
Last Year's Household Income				
<\$16,000	104	6,019	32.7	(25.9-40.3)
\$16,001-\$24,000	60	3,939	31.1	(22.9-40.6)
\$24,001-\$40,000	68	4,378	32.2	(24.3-41.2)
\$40,001-\$60,000	56	4,123	31.5	(23.6-40.7)
\$60,001+	109	9,574	24.1	(20.0-28.7)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 7. Prevalence of maternal health problems during the 3 months before pregnancy,
MI PRAMS, 2019**

Maternal health problem	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Types (non-exclusive)				
Anxiety	354	29,347	28.4	(25.5-31.6)
Depression	225	19,338	18.8	(16.2-21.6)
Anemia	271	15,775	15.4	(13.3-17.7)
Asthma	199	12,960	12.6	(10.6-14.9)
Thyroid problems	98	9,027	8.8	(7.0-10.9)
Hypertension	100	6,479	6.3	(4.9-8.0)
Polycystic Ovary Syndrome (PCOS)	74	6,353	6.2	(4.8-8.0)
Heart problems	49	3,989	3.9	(2.8-5.4)
Diabetes	39	3,170	3.1	(2.1-4.4)
Epilepsy	36	2,907	2.8	(1.9-4.1)

Table 8. Prevalence of health care visits in the year before pregnancy - including dental or mental health - with a doctor, nurse, or other healthcare worker by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	927	73,109	70.5	(67.5-73.4)
Maternal Age				
<20 Years	38	2,601	64.3	(47.3-78.3)
20-29 Years	443	35,936	65.3	(60.8-69.5)
30+ Years	446	34,572	77.6	(73.4-81.3)
Race/Ethnicity				
White, non-Hispanic	490	51,037	74.9	(70.8-78.6)
Black, non-Hispanic	331	11,225	57.9	(53.6-62.1)
Hispanic	47	5,153	66.4	(52.7-77.8)
Asian/Pacific Islander, non-Hispanic	14	1,287	48.2	(29.5-67.4)
Other, non-Hispanic	41	4,085	80.7**	(65.6-90.2)
Education				
<High School	71	5,120	48.9	(38.2-59.7)
HS Grad/GED	194	14,022	54.5	(47.5-61.3)
Some College	300	21,465	71.9	(66.5-76.8)
College Degree+	353	31,912	86.4	(82.4-89.6)
Pre-Pregnancy Insurance Status				
Uninsured	31	2,534	37.9	(25.6-51.9)
Medicaid/Public	264	16,698	55.5	(49.4-61.4)
Private	598	51,316	81.3	(77.8-84.3)
Marital Status				
Married	558	49,490	80.1	(76.5-83.2)
Other	369	23,619	56.5	(51.3-61.5)
Parity				
No previous live birth	348	29,445	72.6	(67.6-77.0)
1	282	22,524	71.7	(66.1-76.7)
2+	297	21,140	66.8	(61.0-72.1)
Last Year's Household Income				
<\$16,000	142	8,272	45.4	(37.8-53.2)
\$16,001-\$24,000	102	7,336	58.9	(49.0-68.2)
\$24,001-\$40,000	128	9,247	68.0	(58.8-76.0)
\$40,001-\$60,000	114	9,660	74.7	(65.4-82.2)
\$60,001+	373	34,901	88.1	(84.3-91.0)

Table 9. Type of healthcare visits among women in the 12 months before pregnancy, MI PRAMS, 2019

Type of visit	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Type of visit (non-exclusive)				
Dentist	594	48,619	66.0	(62.2-69.6)
OB/GYN check up	565	44,955	61.0	(57.2-64.8)
Family doctor check up	581	44,408	60.5	(56.6-64.2)
Family planning/Birth control	161	12,114	16.4	(13.8-19.5)
Illness	149	11,450	15.5	(12.9-18.6)
Depression/Anxiety	136	10,862	14.7	(12.1-17.9)
Injury	48	4,151	5.6	(4.0-7.8)
Other	117	8,578	11.6	(9.4-14.3)

Table 10. Type of counseling/screening among women reporting any healthcare visits in the 12 months before pregnancy, MI PRAMS, 2019

Type of counseling/screening	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Type (non-exclusive)				
Smoking screening	747	58,913	81.2	(78.0-84.1)
Current job duties	601	47,011	65.1	(61.2-68.8)
Depression screening	610	46,495	64.7	(60.9-68.3)
Emotional and physical abuse screening	583	44,702	62.0	(58.2-65.7)
Family planning	401	33,425	46.3	(42.5-50.3)
Birth control	418	31,265	43.2	(39.4-47.2)
Healthy weight	390	28,313	39.2	(35.5-43.0)
Folic acid vitamins	311	26,369	36.6	(33.0-40.4)
Improving pre-conception health	286	23,454	32.7	(29.1-36.5)
HIV test administered	335	19,918	28.3	(25.1-31.8)
STI	259	16,694	23.1	(20.1-26.4)
Controlling medical conditions (e.g., diabetes/high blood pressure)	142	8,487	11.8	(9.7-14.3)

Table 11. Frequency of taking a folate-containing vitamin in the month before pregnancy, MI PRAMS, 2019

Frequency of vitamin use	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Frequency of vitamin use				
Did not take a vitamin	740	52,606	50.5	(47.2-53.7)
1-3 times per week	121	8,527	8.2	(6.6-10.1)
4-6 times per week	78	6,272	6.0	(4.7-7.7)
Every day of the week	448	36,820	35.3	(32.3-38.5)

Table 12. Prevalence of no folic acid containing vitamin consumption in the month before pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	740	52,606	50.5	(47.2-53.7)
Maternal Age				
<20 Years	42	3,000	71.5	(56.2-83.0)
20-29 Years	436	32,691	59.2	(54.6-63.6)
30+ Years	262	16,915	37.8	(33.3-42.5)
Race/Ethnicity				
White, non-Hispanic	277	30,810	44.9	(40.6-49.3)
Black, non-Hispanic	377	12,807	65.6	(61.4-69.5)
Hispanic	48	5,397	68.6	(55.9-79.0)
Asian/Pacific Islander, non-Hispanic	12	1,259	47.2	(28.7-66.5)
Other, non-Hispanic	24	2,284	46.1	(30.8-62.2)
Education				
<High School	112	8,711	80.0	(71.2-86.6)
HS Grad/GED	243	17,246	66.9	(60.1-73.0)
Some College	253	16,113	53.8	(48.0-59.6)
College Degree+	127	10,075	27.3	(22.8-32.2)
Pre-Pregnancy Insurance Status				
Uninsured	61	4,424	63.0	(49.4-74.7)
Medicaid/Public	342	22,166	72.9	(67.5-77.8)
Private	315	24,340	38.6	(34.6-42.7)
Marital Status				
Married	285	23,482	37.8	(33.8-41.9)
Other	455	29,125	69.3	(64.4-73.7)
Parity				
No previous live birth	230	17,196	42.1	(37.0-47.4)
1	228	16,420	51.9	(46.0-57.7)
2+	282	18,991	59.8	(54.0-65.4)
Last Year's Household Income				
<\$16,000	208	13,310	72.3	(65.2-78.4)
\$16,001-\$24,000	128	8,886	70.5	(60.7-78.7)
\$24,001-\$40,000	128	8,919	66.1	(56.8-74.3)
\$40,001-\$60,000	90	7,313	56.0	(46.6-65.0)
\$60,001+	111	10,215	25.7	(21.4-30.5)

Explanation of Pregnancy Intention, Pregnancy Timing, and Contraceptive Behavior

Michigan PRAMS asks women about several similar yet distinct concepts around pregnancy intention and contraceptive behavior. To measure pregnancy intention, PRAMS asks mothers to think about the time just before they became pregnant. Mothers report how they felt about becoming pregnant. Women can report that they wanted to be pregnant:

sooner

right at that time

later

not then or at any time in the future

Mothers who wanted to be pregnant sooner or right when they got pregnant, combined, make up women with an "intended" pregnancy. Mothers who wanted to be pregnant either never or sometime in the future had pregnancies that are classified as "unintended."

Starting with Phase 7 of MI PRAMS (2012-2015) and continuing into Phase 8 (2016-2020), a fifth pregnancy intention response option is offered. Women who were not sure whether they wanted to be pregnant could indicate that instead of choosing one of the other four responses. Because of the change in response options for pregnancy intention, comparisons cannot be made across survey phases (before 2012 and after 2012). **Table 13** reports pregnancy intention for Michigan mothers and **Table 15** summarizes the characteristics of women who reported an unintended pregnancy.

Pregnancy timing is calculated for all mothers who did not indicate their pregnancy was intended. Mothers who wanted to be pregnant in the future have pregnancies classified as "mistimed." Mothers who did not ever wish to get pregnant had pregnancies classified as "unwanted." **Table 14** contains these results.

Contraceptive behavior is distinct from pregnancy intention in that it asks mothers to report their actions at the time before their most recent pregnancy, not just their feelings about becoming pregnant. **Table 16** summarizes contraceptive behavior. Mothers are asked whether they were trying to conceive at the time they became pregnant. Characteristics of women who report that they were trying to conceive at the time of pregnancy are reported in **Table 17**.

Mothers who were not trying to conceive are asked whether they were using any contraceptive practices or engaged in any behavior to prevent pregnancy at the time they became pregnant. **Table 18** reports the characteristics of mothers who became pregnant despite acting to prevent pregnancy. These mothers also share the type of contraception they were using when they got pregnant in **Table 19**. Characteristics of women who report they were not trying to conceive but were also not engaged in any behaviors that would prevent pregnancy are reported in **Table 20**. These mothers also share their reasons for not using contraceptives in **Table 21**.

Table 13. Distribution of pregnancy intention categories, MI PRAMS, 2019

Intention	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Intended	743	61,665	59.8	(56.5-62.9)
Unintended	371	25,151	24.4	(21.7-27.3)
Unsure	260	16,381	15.9	(13.7-18.4)

Table 14. Distribution of unintended pregnancy subtypes among women reporting either unsure or unintended pregnancy, MI PRAMS, 2019

Unintended pregnancy subtype	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Mistimed	260	18,192	43.8	(38.8-49.0)
Unwanted	111	6,959	16.8	(13.2-21.0)
Unsure	260	16,381	39.4	(34.6-44.5)

**Table 15. Prevalence of unintended pregnancy by maternal characteristics,
MI PRAMS, 2019**

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	371	25,151	24.4	(21.7-27.3)
Maternal Age				
<20 Years	32	2,218	53.9	(37.3-69.7)
20-29 Years	227	15,468	28.2	(24.2-32.4)
30+ Years	112	7,466	16.9	(13.6-20.8)
Race/Ethnicity				
White, non-Hispanic	110	12,939	19.1	(15.8-22.9)
Black, non-Hispanic	215	7,328	37.7	(33.6-41.9)
Hispanic	27	2,902	37.0	(25.2-50.7)
Asian/Pacific Islander, non-Hispanic	6	621	23.3**	(10.4-44.1)
Other, non-Hispanic	11	1,181	23.3**	(12.1-40.3)
Education				
<High School	60	3,377	31.3	(22.5-41.6)
HS Grad/GED	123	8,822	34.4	(28.0-41.4)
Some College	125	8,342	28.2	(23.3-33.8)
College Degree+	59	4,304	11.7	(8.8-15.5)
Pre-Pregnancy Insurance Status				
Uninsured	29	2,091	30.0	(19.5-43.1)
Medicaid/Public	179	11,203	37.3	(31.6-43.4)
Private	149	10,760	17.2	(14.3-20.6)
Marital Status				
Married	114	9,667	15.7	(12.9-19.0)
Other	257	15,484	37.1	(32.3-42.3)
Parity				
No previous live birth	122	8,986	22.3	(18.2-27.1)
1	97	6,510	20.6	(16.2-26.0)
2+	152	9,656	30.7	(25.6-36.3)
Last Year's Household Income				
<\$16,000	119	7,250	39.6	(32.3-47.5)
\$16,001-\$24,000	70	5,404	44.1	(34.5-54.1)
\$24,001-\$40,000	57	3,415	25.5	(18.5-34.0)
\$40,001-\$60,000	39	3,262	25.2	(17.8-34.4)
\$60,001+	50	4,157	10.6	(7.8-14.2)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 16. Distribution of contraceptive behaviors at the time of conception,
MI PRAMS, 2019**

Contraceptive practice subtype	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Trying to conceive	674	58,670	56.8	(53.6-60.0)
Avoiding pregnancy	241	16,626	16.1	(13.8-18.7)
Neither trying nor avoiding pregnancy	458	27,963	27.1	(24.4-30.0)

Table 17. Prevalence of trying to conceive during the pre-pregnancy period by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	674	58,670	56.8	(53.6-60.0)
Maternal Age				
<20 Years	8	852	20.6**	(9.9-37.8)
20-29 Years	316	28,481	51.9	(47.3-56.4)
30+ Years	350	29,337	66.3	(61.7-70.6)
Race/Ethnicity				
White, non-Hispanic	419	43,840	64.6	(60.3-68.7)
Black, non-Hispanic	156	5,176	26.9	(23.2-30.9)
Hispanic	41	4,285	54.6	(41.3-67.3)
Asian/Pacific Islander, non-Hispanic	20	1,830	69.2**	(48.2-84.4)
Other, non-Hispanic	34	3,117	61.6	(44.9-75.9)
Education				
<High School	40	4,324	40.7	(30.4-52.0)
HS Grad/GED	114	9,916	38.6	(31.9-45.7)
Some College	203	15,320	52.0	(46.2-57.8)
College Degree+	314	29,021	78.8	(74.3-82.7)
Pre-Pregnancy Insurance Status				
Uninsured	31	2,766	41.0	(28.5-54.7)
Medicaid/Public	132	10,327	34.6	(28.9-40.8)
Private	488	43,801	69.5	(65.6-73.1)
Marital Status				
Married	504	45,693	73.7	(69.9-77.2)
Other	170	12,977	31.4	(26.7-36.6)
Parity				
No previous live birth	293	26,248	64.6	(59.4-69.5)
1	226	19,875	63.5	(57.8-68.9)
2+	155	12,547	40.0	(34.3-45.9)
Last Year's Household Income				
<\$16,000	73	5,340	29.4	(22.6-37.1)
\$16,001-\$24,000	51	3,037	24.8	(17.4-34.2)
\$24,001-\$40,000	80	7,328	55.0	(45.7-63.9)
\$40,001-\$60,000	87	7,819	59.9	(50.5-68.7)
\$60,001+	340	32,137	81.2	(76.8-84.9)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 18. Prevalence of becoming pregnant despite using contraceptive practices by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	241	16,626	16.1	(13.8-18.7)
Maternal Age				
<20 Years	21	1,265	30.5	(17.3-48.0)
20-29 Years	140	9,897	18.0	(14.7-21.9)
30+ Years	80	5,465	12.4	(9.5-16.0)
Race/Ethnicity				
White, non-Hispanic	74	8,911	13.1	(10.3-16.6)
Black, non-Hispanic	138	4,627	24.0	(20.5-27.9)
Hispanic	17	1,818	23.2	(13.6-36.6)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	9	981	19.4**	(9.4-35.8)
Education				
<High School	34	2,186	20.6	(13.2-30.7)
HS Grad/GED	82	6,236	24.3	(18.6-31.0)
Some College	79	5,427	18.4	(14.3-23.4)
College Degree+	43	2,534	6.9	(4.8-9.8)
Pre-Pregnancy Insurance Status				
Uninsured	21	1,506	22.3	(13.4-34.7)
Medicaid/Public	102	6,830	22.9	(18.1-28.6)
Private	110	7,314	11.6	(9.2-14.5)
Marital Status				
Married	72	5,804	9.4	(7.2-12.1)
Other	169	10,822	26.2	(21.8-31.1)
Parity				
No previous live birth	68	4,996	12.3	(9.1-16.4)
1	75	4,385	14.0	(10.5-18.4)
2+	98	7,245	23.1	(18.4-28.6)
Last Year's Household Income				
<\$16,000	73	4,490	24.7	(18.6-32.0)
\$16,001-\$24,000	45	4,196	34.3	(25.2-44.8)
\$24,001-\$40,000	30	2,290	17.2	(11.1-25.7)
\$40,001-\$60,000	28	1,720	13.2	(8.2-20.6)
\$60,001+	35	2,400	6.1	(4.1-8.8)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 19. Prevalence of contraception methods used by women who became pregnant despite using contraceptive practices, MI PRAMS, 2019

Method	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Reason (non-exclusive)				
Condoms	117	7,642	43.0	(35.3-51.1)
Withdrawal	97	6,709	37.8	(30.3-45.9)
Oral contraceptives	61	5,108	28.8	(21.7-37.0)
Rhythm method	23	1,538	8.7	(5.1-14.3)
Shot every 3 months	25	1,307	7.4	(4.2-12.5)
Contraceptive patch	12	612	3.4**	(1.8-6.6)
Intrauterine device	7	359	2.0**	(0.8-5.2)
Contraceptive implant	*	*	*	*
Other	11	556	3.1**	(1.4-6.8)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 20. Prevalence of women who were not trying to conceive - but were not doing anything to prevent pregnancy - by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	458	27,963	27.1	(24.4-30.0)
Maternal Age				
<20 Years	35	2,026	48.9	(32.8-65.3)
20-29 Years	257	16,507	30.1	(26.1-34.3)
30+ Years	166	9,431	21.3	(17.8-25.3)
Race/Ethnicity				
White, non-Hispanic	148	15,084	22.2	(18.8-26.1)
Black, non-Hispanic	277	9,444	49.1	(44.7-53.4)
Hispanic	16	1,742	22.2	(12.8-35.7)
Asian/Pacific Islander, non-Hispanic	6	706	26.7**	(12.6-47.9)
Other, non-Hispanic	10	963	19.0**	(8.9-36.0)
Education				
<High School	78	4,102	38.7	(29.2-49.1)
HS Grad/GED	168	9,539	37.1	(30.8-43.9)
Some College	141	8,722	29.6	(24.6-35.1)
College Degree+	66	5,269	14.3	(11.0-18.4)
Pre-Pregnancy Insurance Status				
Uninsured	34	2,482	36.7	(25.2-50.1)
Medicaid/Public	242	12,672	42.5	(36.7-48.4)
Private	167	11,920	18.9	(15.9-22.3)
Marital Status				
Married	140	10,481	16.9	(14.0-20.2)
Other	318	17,482	42.3	(37.4-47.5)
Parity				
No previous live births	143	9,368	23.1	(19.0-27.7)
1	114	7,023	22.5	(17.9-27.7)
2+	201	11,572	36.9	(31.6-42.5)
Last Year's Household Income				
<\$16,000	149	8,354	45.9	(38.3-53.7)
\$16,001-\$24,000	81	4,989	40.8	(31.8-50.6)
\$24,001-\$40,000	75	3,712	27.8	(20.8-36.2)
\$40,001-\$60,000	43	3,510	26.9	(19.4-36.0)
\$60,001+	56	5,045	12.7	(9.6-16.7)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 21. Reasons women who were not trying to conceive - but were not doing anything to prevent pregnancy - did not use contraception, MI PRAMS, 2019

Reason	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Reason (non-exclusive)				
Did not mind getting pregnant	233	14,650	50.9	(44.9-56.8)
Thought could not get pregnant at that time	127	7,604	26.3	(21.3-31.9)
Partner did not want to use birth control	81	4,879	17.1	(13.0-22.2)
Side effects from birth control	75	4,460	15.4	(11.6-20.2)
Thought self/partner sterile	42	2,925	10.1	(6.8-14.7)
Problems getting birth control	24	1,982	6.8	(4.2-10.9)
Forgot to use birth control	36	1,932	6.7	(4.3-10.2)
Other reason	60	3,772	13.1	(9.5-17.7)

Table 22. Prevalence of using any postpartum contraceptive method by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,036	79,033	77.0	(74.2-79.6)
Maternal Age				
<20 Years	45	2,895	70.9	(53.5-83.8)
20-29 Years	535	41,498	76.2	(72.1-79.9)
30+ Years	456	34,640	78.6	(74.4-82.2)
Race/Ethnicity				
White, non-Hispanic	493	52,874	77.9	(74.1-81.2)
Black, non-Hispanic	420	13,976	74.6	(70.6-78.3)
Hispanic	60	6,319	80.3	(67.9-88.7)
Asian/Pacific Islander, non-Hispanic	22	2,082	78.0**	(57.7-90.2)
Other, non-Hispanic	37	3,414	69.3	(52.4-82.2)
Education				
<High School	113	8,460	80.6	(71.8-87.2)
HS Grad/GED	274	18,945	74.4	(67.7-80.1)
Some College	316	22,657	77.3	(72.0-81.8)
College Degree+	324	28,373	77.4	(72.6-81.5)
Pre-Pregnancy Insurance Status				
Uninsured	70	5,590	80.2	(67.9-88.5)
Medicaid/Public	363	22,748	77.7	(72.1-82.4)
Private	571	48,074	76.7	(73.0-80.0)
Marital Status				
Married	540	47,559	77.0	(73.3-80.3)
Other	496	31,475	77.0	(72.4-81.1)
Parity				
No previous live birth	356	29,420	73.4	(68.5-77.7)
1	337	25,397	80.6	(75.5-84.9)
2+	343	24,216	78.1	(72.9-82.6)
Last Year's Household Income				
<\$16,000	224	13,346	72.8	(65.2-79.3)
\$16,001-\$24,000	137	9,785	78.0	(69.3-84.8)
\$24,001-\$40,000	148	11,001	82.9	(74.8-88.8)
\$40,001-\$60,000	125	10,291	79.2	(70.7-85.7)
\$60,001+	327	30,527	77.1	(72.5-81.2)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 23. Prevalence of postpartum contraceptive methods,
MI PRAMS, 2019**

Method	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Pregnancy prevention method (non-exclusive)				
Condoms	317	24,686	31.0	(27.7-34.6)
Oral contraceptives	249	20,767	26.1	(22.9-29.6)
Withdrawal	191	15,015	18.9	(16.1-22.0)
Intrauterine device	120	10,331	13.0	(10.6-15.8)
Abstinence	144	9,909	12.5	(10.1-15.2)
Tubal ligation	131	8,272	10.4	(8.3-12.9)
Shot every 3 months	107	5,814	7.3	(5.7-9.4)
Partner had vasectomy	45	4,367	5.5	(4.0-7.5)
Rhythm method	40	3,746	4.7	(3.3-6.7)
Contraceptive implant	33	2,476	3.1	(1.9-4.9)
Contraceptive patch or vaginal ring	23	1,807	2.3	(1.3-3.8)
Other method	23	1,589	2.0	(1.2-3.3)

Table 24. Prevalence of no postpartum contraceptive methods by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	319	23,582	23.0	(20.4-25.8)
Maternal Age				
<20 Years	16	1,186	29.1	(16.2-46.5)
20-29 Years	171	12,953	23.8	(20.1-27.9)
30+ Years	132	9,443	21.4	(17.8-25.6)
Race/Ethnicity				
White, non-Hispanic	147	15,043	22.1	(18.8-25.9)
Black, non-Hispanic	135	4,755	25.4	(21.7-29.4)
Hispanic	15	1,550	19.7	(11.3-32.1)
Asian/Pacific Islander, non-Hispanic	6	587	22.0**	(9.8-42.3)
Other, non-Hispanic	14	1,512	30.7	(17.8-47.6)
Education				
<High School	35	2,031	19.4	(12.8-28.2)
HS Grad/GED	84	6,514	25.6	(19.9-32.3)
Some College	102	6,668	22.7	(18.2-28.0)
College Degree+	96	8,304	22.6	(18.5-27.4)
Pre-Pregnancy Insurance Status				
Uninsured	16	1,383	19.8	(11.5-32.1)
Medicaid/Public	104	6,526	22.3	(17.6-27.9)
Private	184	14,629	23.3	(20.0-27.0)
Marital Status				
Married	168	14,196	23.0	(19.7-26.7)
Other	151	9,386	23.0	(18.9-27.6)
Parity				
No previous live birth	142	10,678	26.6	(22.3-31.5)
1	80	6,116	19.4	(15.1-24.5)
2+	97	6,788	21.9	(17.4-27.1)
Last Year's Household Income				
<\$16,000	75	4,986	27.2	(20.7-34.8)
\$16,001-\$24,000	44	2,758	22.0	(15.2-30.7)
\$24,001-\$40,000	35	2,271	17.1	(11.2-25.2)
\$40,001-\$60,000	32	2,703	20.8	(14.3-29.3)
\$60,001+	104	9,054	22.9	(18.8-27.5)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 25. Reasons for not using any postpartum contraception,
MI PRAMS, 2019**

Reason	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Reason (non-exclusive)				
Does not want to use birth control	135	10,573	43.9	(37.4-50.6)
Side effects from birth control	125	9,966	41.4	(34.9-48.1)
Not having sex	95	6,510	27.0	(21.6-33.2)
Wants to get pregnant	43	3,599	15.1	(10.8-20.6)
Partner does not want to use anything	33	2,167	9.0	(5.9-13.4)
Pregnant now	11	753	3.1**	(1.4-6.6)
Problems getting birth control	9	563	2.3**	(1.1-4.9)
Mother had tubes tied	13	491	2.0**	(1.0-4.1)
Other reason	53	4,141	17.2	(12.7-22.9)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 26. Trimester of entry into prenatal care,
MI PRAMS, 2019**

Trimester of entry	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
1st Trimester	1,140	88,954	87.1	(84.8-89.1)
2nd Trimester	175	11,397	11.2	(9.3-13.4)
3rd Trimester	20	699	0.7	(0.4-1.1)
No prenatal care	12	1,082	1.1**	(0.5-2.1)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 27. Source of payments for prenatal care,
MI PRAMS, 2019**

Source of prenatal care payment	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Source of payment (non-exclusive)				
Uninsured during pregnancy	15	1,313	1.3**	(0.7-2.4)
Private - from work	605	51,178	50.4	(47.2-53.6)
Medicaid	693	45,431	44.8	(41.5-48.0)
Private - from parent	78	6,097	6.0	(4.5-7.9)
Private - from MI Health Insurance Marketplace	51	3,738	3.7	(2.6-5.2)
Other government	18	967	1.0	(0.5-1.7)
Private - TRICARE/other military	7	581	0.6**	(0.2-1.4)
Indian Health Services or other tribal	*	*	*	*
Other	56	4,367	4.3	(3.1-5.9)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 28. Prevalence of first trimester entry into prenatal care by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,140	88,954	87.1	(84.8-89.1)
Maternal Age				
<20 Years	42	2,905	70.2	(53.8-82.7)
20-29 Years	582	47,012	86.6	(83.3-89.4)
30+ Years	516	39,037	89.3	(85.8-92.0)
Race/Ethnicity				
White, non-Hispanic	582	61,092	90.5	(87.4-93.0)
Black, non-Hispanic	418	13,888	74.8	(70.7-78.5)
Hispanic	62	6,648	84.5**	(72.6-91.8)
Asian/Pacific Islander, non-Hispanic	24	2,216	83.0**	(62.6-93.5)
Other, non-Hispanic	*	*	*	*
Education				
<High School	100	7,793	73.1	(63.2-81.1)
HS Grad/GED	277	20,559	81.6	(75.6-86.3)
Some College	356	25,135	86.4	(81.8-90.0)
College Degree+	396	34,803	95.3	(92.4-97.1)
Pre-Pregnancy Insurance Status				
Uninsured	56	4,292	61.5	(47.8-73.6)
Medicaid/Public	358	23,611	79.7	(74.7-83.9)
Private	691	58,364	94.1	(91.9-95.8)
Marital Status				
Married	649	56,824	92.9	(90.3-94.8)
Other	491	32,130	78.5	(73.9-82.4)
Parity				
No previous live birth	441	35,993	89.9	(85.9-92.8)
1	358	28,030	89.3	(85.3-92.3)
2+	341	24,931	81.2	(76.3-85.3)
Last Year's Household Income				
<\$16,000	210	12,765	71.3	(63.8-77.8)
\$16,001-\$24,000	137	10,238	83.1	(75.1-88.9)
\$24,001-\$40,000	155	11,583	86.6	(78.6-91.9)
\$40,001-\$60,000	145	12,094	93.1**	(86.3-96.6)
\$60,001+	405	37,436	95.3	(92.6-97.1)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 29. Prevalence of getting prenatal care as early as wanted, MI PRAMS, 2019

Got care as early as wanted	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
No	214	14,271	14.0	(11.9-16.4)
Yes	1,148	87,766	86.0	(83.6-88.1)

Table 30. Prevalence of getting prenatal care as early as wanted by first trimester entry into prenatal care, MI PRAMS, 2019

Trimester of entry to prenatal care	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
First trimester				
Yes, started PNC as early as wanted	1,037	80,645	91.1	(88.9-92.9)
No, wanted to start PNC earlier	100	7,882	8.9	(7.1-11.1)
After first trimester				
Yes, started PNC as early as wanted	83	5,533	47.4	(38.2-56.8)
No, wanted to start PNC earlier	109	6,143	52.6	(43.2-61.8)

Table 31. Barriers to starting prenatal care as early as wanted among women who began prenatal care during the first trimester, MI PRAMS, 2019

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Barrier (non-exclusive)				
Could not get appt	35	3,316	47.7	(35.2-60.4)
Doctor/health plan would not start	30	2,643	38.1	(26.7-51.0)
Did not know pregnant	28	1,569	23.3	(14.8-34.7)
Too many other things	13	1,191	17.5**	(9.3-30.3)
Not enough money to pay	12	824	12.4**	(6.3-22.9)
Wanted to keep pregnancy secret	9	768	11.7**	(5.0-24.8)
No Medicaid card	9	740	11.3**	(5.4-22.1)
No time off from work or school	9	565	8.6**	(3.9-18.0)
No transportation	*	*	*	*
No childcare	*	*	*	*
Did not want prenatal care	0	0	0.0	

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 32. Barriers to starting prenatal care as early as wanted among women who began prenatal care after the first trimester, MI PRAMS, 2019

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Barrier (non-exclusive)				
Could not get appt	50	2,664	39.2	(27.9-51.8)
Did not know pregnant	42	2,350	33.8	(23.3-46.2)
Too many other things	41	2,115	31.6	(21.6-43.7)
Not enough money or insurance to pay	31	2,081	31.0	(20.4-44.0)
Doctor/health plan would not start	19	1,394	21.0	(11.9-34.2)
No Medicaid card	21	1,183	17.7	(10.1-29.2)
No transportation	27	1,087	16.2	(10.3-24.5)
No time off from work or school	18	728	10.9	(6.0-19.0)
Wanted to keep pregnancy secret	19	673	10.1	(6.1-16.2)
Did not want prenatal care	7	561	8.5**	(3.3-20.4)
Could not get childcare	12	542	8.2**	(4.3-15.0)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 33. Prevalence of topics discussed by health care provider during prenatal care visits, MI PRAMS, 2019

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Topic (non-exclusive)				
Smoking during pregnancy	1,318	99,276	97.0	(95.7-97.8)
Using prescription medicine during pregnancy	1,298	99,028	96.6	(95.4-97.4)
Using alcohol during pregnancy	1,308	98,728	96.5	(95.2-97.4)
Breastfeeding plans	1,257	94,782	92.4	(90.5-94.0)
Using illegal drugs during pregnancy	1,205	89,916	87.9	(85.6-89.8)
Feeling depressed	1,182	87,593	85.5	(83.0-87.7)
Post-partum contraception plans	1,144	85,426	83.5	(81.0-85.7)
Experiencing emotional or physical abuse	1,137	83,292	81.3	(78.6-83.7)
Offered HIV testing	959	69,580	68.7	(65.5-71.7)
Knowledge of appropriate weight gain	760	56,298	55.3	(52.0-58.5)

Table 34. Prevalence of pregnancy complications, MI PRAMS, 2019

Pregnancy complications	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Severe nausea, vomiting, and dehydration	270	18,424	17.8	(15.4-20.6)
Depression	235	17,581	17.0	(14.6-19.8)
High blood pressure	251	15,610	15.1	(13.0-17.5)
Kidney/bladder infection	180	13,363	13.0	(10.9-15.4)
Gestational diabetes w/o pre-pregnancy diabetes	116	8,598	8.5	(6.8-10.5)

Table 35. Prevalence of smoking during the 3 months before pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	273	21,221	20.5	(17.8-23.4)
Maternal Age				
<20 Years	9	939	22.8**	(10.8-41.8)
20-29 Years	163	13,945	25.2	(21.3-29.7)
30+ Years	101	6,336	14.3	(11.3-18.0)
Race/Ethnicity				
White, non-Hispanic	132	14,367	21.1	(17.6-25.0)
Black, non-Hispanic	112	3,741	19.5	(16.3-23.1)
Hispanic	16	1,863	23.8	(14.0-37.4)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	9	767	15.1**	(6.6-31.0)
Education				
<High School	57	4,939	45.7	(35.2-56.6)
HS Grad/GED	109	8,231	32.2	(25.9-39.2)
Some College	79	5,979	20.3	(15.8-25.6)
College Degree+	27	2,016	5.4	(3.5-8.4)
Pre-Pregnancy Insurance Status				
Uninsured	24	2,186	31.1	(20.1-44.7)
Medicaid/Public	154	10,982	36.7	(30.9-42.9)
Private	90	7,529	11.9	(9.4-15.1)
Marital Status				
Married	84	6,954	11.2	(8.8-14.2)
Other	189	14,266	34.2	(29.3-39.5)
Parity				
No previous live birth	76	6,585	16.1	(12.4-20.7)
1	79	6,150	19.4	(14.9-24.8)
2+	118	8,485	27.2	(22.1-33.0)
Last Year's Household Income				
<\$16,000	90	6,153	33.6	(26.4-41.6)
\$16,001-\$24,000	50	4,360	34.8	(25.8-45.0)
\$24,001-\$40,000	41	3,749	27.8	(19.8-37.5)
\$40,001-\$60,000	21	1,953	14.9	(9.1-23.5)
\$60,001+	41	3,348	8.4	(5.9-11.8)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 36. Prevalence of smoking during the last 3 months of pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	143	11,224	10.8	(8.8-13.2)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	86	8,045	14.5	(11.3-18.5)
30+ Years	53	2,895	6.5	(4.6-9.2)
Race/Ethnicity				
White, non-Hispanic	78	8,257	12.1	(9.4-15.4)
Black, non-Hispanic	55	1,943	10.1	(7.8-13.1)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	0	0	0.0	
Other, non-Hispanic	6	608	12.0**	(4.5-28.4)
Education				
<High School	38	3,602	33.4	(23.6-44.8)
HS Grad/GED	57	3,964	15.5	(10.9-21.4)
Some College	40	3,195	10.8	(7.4-15.3)
College Degree+	7	408	1.1**	(0.5-2.7)
Pregnancy Insurance Status				
Medicaid/Public	99	8,120	22.1	(17.5-27.4)
Private	37	2,704	4.5	(2.9-6.8)
Marital Status				
Married	35	2,540	4.1	(2.7-6.2)
Other	108	8,684	20.8	(16.6-25.7)
Parity				
No previous live birth	32	2,670	6.5	(4.2-10.1)
1	40	3,133	9.9	(6.7-14.4)
2+	71	5,421	17.3	(13.0-22.6)
Last Year's Household Income				
<\$16,000	58	4,220	23.0	(16.8-30.6)
\$16,001-\$24,000	29	2,257	18.0	(11.5-27.0)
\$24,001-\$40,000	16	1,614	11.9**	(6.5-20.9)
\$40,001-\$60,000	11	1,161	8.9**	(4.4-17.2)
\$60,001+	13	885	2.2**	(1.1-4.3)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 37. Prevalence of smoking after pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	203	13,923	13.4	(11.3-15.9)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	124	9,369	17.0	(13.7-20.9)
30+ Years	74	4,250	9.6	(7.1-12.8)
Race/Ethnicity				
White, non-Hispanic	89	9,039	13.3	(10.4-16.7)
Black, non-Hispanic	96	3,205	16.7	(13.7-20.1)
Hispanic	8	673	8.6**	(3.3-20.5)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	8	742	14.7**	(6.3-30.6)
Education				
<High School	47	3,879	36.0	(26.1-47.4)
HS Grad/GED	87	5,801	22.6	(17.2-29.1)
Some College	56	3,514	11.9	(8.7-16.1)
College Degree+	13	728	2.0**	(1.0-3.8)
Post Pregnancy Insurance Status				
Uninsured	14	1,165	22.7	(12.4-37.9)
Medicaid/Public	136	9,164	26.2	(21.4-31.6)
Private	47	3,201	5.3	(3.7-7.7)
Marital Status				
Married	49	3,501	5.6	(4.0-7.9)
Other	154	10,422	25.1	(20.7-30.1)
Parity				
No previous live birth	50	3,259	8.0	(5.5-11.4)
1	62	4,370	13.9	(10.1-18.7)
2+	91	6,294	20.1	(15.6-25.6)
Last Year's Household Income				
<\$16,000	76	4,854	26.4	(19.9-34.0)
\$16,001-\$24,000	39	2,958	23.6	(16.1-33.2)
\$24,001-\$40,000	28	2,160	16.0	(9.9-24.8)
\$40,001-\$60,000	15	1,177	9.2**	(4.8-16.7)
\$60,001+	24	1,771	4.5	(2.7-7.1)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 38. Prevalence of electronic cigarette usage during the 3 months before pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	37	3,348	3.2	(2.1-4.9)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	27	2,712	4.9	(3.1-7.7)
30+ Years	*	*	*	*
Race/Ethnicity				
White, non-Hispanic	21	2,491	3.6	(2.2-5.9)
Black, non-Hispanic	11	363	1.9**	(1.0-3.5)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	0	0	0.0	
Other, non-Hispanic	*	*	*	*
Education				
<High School	*	*	*	*
HS Grad/GED	16	1,371	5.4**	(2.8-10.1)
Some College	12	1,040	3.5**	(1.7-7.0)
College Degree+	*	*	*	*
Pre-Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	14	1,367	4.6**	(2.3-8.8)
Private	18	1,679	2.7	(1.5-4.7)
Marital Status				
Married	12	1,053	1.7**	(0.9-3.3)
Other	25	2,295	5.5	(3.3-9.1)
Parity				
No previous live birth	20	2,141	5.3	(3.1-8.9)
1	*	*	*	*
2+	12	767	2.5**	(1.1-5.2)
Last Year's Household Income				
<\$16,000	10	859	4.7**	(2.0-10.4)
\$16,001-\$24,000	10	960	7.7**	(3.4-16.2)
\$24,001-\$40,000	*	*	*	*
\$40,001-\$60,000	*	*	*	*
\$60,001+	*	*	*	*

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 39. Prevalence of electronic cigarette usage during the last 3 months of pregnancy
MI PRAMS, 2019**

E-cigarette usage	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
No	1,364	102,747	99.1**	(98.0-99.6)
Yes	9	881	0.9**	(0.4-2.0)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 40. Prevalence of hookah usage in 2 years before survey completion by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	89	4,532	4.4	(3.5-5.7)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	57	2,623	4.8	(3.5-6.5)
30+ Years	28	1,758	4.0	(2.6-6.3)
Race/Ethnicity				
White, non-Hispanic	17	1,465	2.2	(1.3-3.8)
Black, non-Hispanic	64	2,395	12.7	(10.0-16.0)
Hispanic	6	537	6.8**	(2.8-15.8)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	11	427	4.1**	(2.2-7.7)
HS Grad/GED	34	1,682	6.6	(4.3-10.0)
Some College	27	1,360	4.6	(2.9-7.2)
College Degree+	16	1,023	2.8	(1.6-5.0)
Pre-Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	40	1,625	5.5	(3.8-8.0)
Private	40	2,559	4.1	(2.9-5.9)
Marital Status				
Married	21	1,615	2.6	(1.6-4.3)
Other	68	2,916	7.1	(5.4-9.3)
Parity				
No previous live birth	37	1,941	4.8	(3.3-7.0)
1	24	1,162	3.7	(2.3-6.1)
2+	28	1,429	4.6	(2.9-7.3)
Last Year's Household Income				
<\$16,000	25	1,116	6.2	(3.8-10.0)
\$16,001-\$24,000	13	471	3.8	(2.1-6.6)
\$24,001-\$40,000	17	726	5.5	(3.3-9.2)
\$40,001-\$60,000	6	524	4.1**	(1.6-10.0)
\$60,001+	15	1,109	2.8	(1.6-5.0)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 41. Prevalence of marijuana or hash usage in 12 months before pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	297	20,134	19.6	(17.0-22.4)
Maternal Age				
<20 Years	24	1,633	40.4	(24.8-58.1)
20-29 Years	182	13,100	23.9	(20.2-28.2)
30+ Years	91	5,401	12.2	(9.4-15.7)
Race/Ethnicity				
White, non-Hispanic	115	12,613	18.5	(15.2-22.3)
Black, non-Hispanic	161	5,283	28.2	(24.5-32.3)
Hispanic	13	1,233	15.7**	(8.2-28.1)
Asian/Pacific Islander, non-Hispanic	0	0	0.0	
Other, non-Hispanic	8	1,005	20.0**	(9.5-37.3)
Education				
<High School	60	4,515	42.3	(32.0-53.4)
HS Grad/GED	93	6,595	26.0	(20.1-32.8)
Some College	99	5,514	18.7	(14.7-23.5)
College Degree+	44	3,469	9.5	(6.8-13.0)
Pre-Pregnancy Insurance Status				
Uninsured	28	2,149	30.6	(19.9-43.9)
Medicaid/Public	151	9,197	31.2	(25.7-37.2)
Private	109	8,089	12.9	(10.3-16.0)
Marital Status				
Married	75	6,021	9.7	(7.5-12.5)
Other	222	14,113	34.4	(29.5-39.6)
Parity				
No previous live birth	118	8,680	21.5	(17.4-26.2)
1	91	6,141	19.5	(15.1-24.7)
2+	88	5,313	17.2	(13.0-22.3)
Last Year's Household Income				
<\$16,000	91	5,594	30.5	(23.6-38.3)
\$16,001-\$24,000	59	3,411	27.0	(19.4-36.2)
\$24,001-\$40,000	44	2,888	21.3	(14.6-30.0)
\$40,001-\$60,000	32	3,054	23.4	(16.1-32.7)
\$60,001+	41	3,605	9.1	(6.5-12.6)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 42. Prevalence of marijuana or hash usage during pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	92	6,624	6.5	(4.9-8.4)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	70	5,558	10.2	(7.5-13.6)
30+ Years	21	1,020	2.3**	(1.3-4.2)
Race/Ethnicity				
White, non-Hispanic	35	4,175	6.2	(4.2-8.9)
Black, non-Hispanic	50	1,521	8.1	(6.1-10.7)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	0	0	0.0	
Other, non-Hispanic	*	*	*	*
Education				
<High School	31	2,307	21.6	(13.8-32.3)
HS Grad/GED	27	2,191	8.7	(5.3-14.1)
Some College	23	1,257	4.3	(2.4-7.4)
College Degree+	9	674	1.8**	(0.8-4.0)
Pregnancy Insurance Status				
Medicaid/Public	64	4,663	12.9	(9.4-17.6)
Private	22	1,775	3.0	(1.7-5.0)
Marital Status				
Married	16	964	1.6**	(0.8-2.9)
Other	76	5,660	13.9	(10.4-18.3)
Parity				
No previous live birth	21	1,684	4.2	(2.4-7.3)
1	28	2,411	7.6	(4.8-12.0)
2+	43	2,529	8.2	(5.4-12.2)
Last Year's Household Income				
<\$16,000	36	2,022	11.1	(6.8-17.6)
\$16,001-\$24,000	21	1,557	12.3	(7.1-20.6)
\$24,001-\$40,000	11	1,196	8.9**	(4.3-17.4)
\$40,001-\$60,000	11	956	7.3**	(3.7-14.1)
\$60,001+	7	556	1.4**	(0.6-3.3)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 43. Prevalence of marijuana or hash usage after pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	160	11,192	10.9	(8.9-13.2)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	108	8,149	14.9	(11.8-18.7)
30+ Years	45	2,619	5.9	(4.1-8.6)
Race/Ethnicity				
White, non-Hispanic	64	7,203	10.6	(8.0-13.8)
Black, non-Hispanic	84	2,888	15.5	(12.5-18.9)
Hispanic	8	631	8.1**	(3.2-18.9)
Asian/Pacific Islander, non-Hispanic	0	0	0.0	
Other, non-Hispanic	*	*	*	*
Education				
<High School	43	3,348	31.4	(22.0-42.6)
HS Grad/GED	51	3,803	15.0	(10.4-21.0)
Some College	47	2,535	8.6	(6.1-12.0)
College Degree+	17	1,310	3.6	(2.1-6.2)
Post Pregnancy Insurance Status				
Uninsured	10	592	11.6**	(5.4-23.2)
Medicaid/Public	104	6,939	20.0	(15.7-25.2)
Private	41	3,436	5.8	(4.0-8.3)
Marital Status				
Married	33	2,864	4.6	(3.1-6.8)
Other	127	8,328	20.3	(16.3-25.0)
Parity				
No previous live birth	51	3,963	9.8	(7.0-13.6)
1	55	3,586	11.4	(8.1-15.8)
2+	54	3,643	11.8	(8.3-16.5)
Last Year's Household Income				
<\$16,000	56	3,248	17.7	(12.4-24.6)
\$16,001-\$24,000	32	2,237	17.7	(11.4-26.5)
\$24,001-\$40,000	25	2,139	15.8	(9.8-24.4)
\$40,001-\$60,000	16	1,578	12.1	(7.0-20.1)
\$60,001+	15	1,192	3.0	(1.7-5.4)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 44. Prevalence of opioid pain reliever usage in 12 months before pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	53	2,829	2.8	(2.0-3.9)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	20	1,155	2.1	(1.2-3.8)
30+ Years	31	1,593	3.6	(2.4-5.5)
Race/Ethnicity				
White, non-Hispanic	17	1,506	2.2	(1.3-3.9)
Black, non-Hispanic	33	1,156	6.2	(4.4-8.7)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	10	448	4.2**	(1.9-9.2)
HS Grad/GED	10	300	1.2**	(0.6-2.3)
Some College	22	1,355	4.6	(2.7-7.6)
College Degree+	10	686	1.9**	(0.9-3.9)
Pre-Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	25	1,309	4.5	(2.8-7.2)
Private	23	1,333	2.1	(1.3-3.6)
Marital Status				
Married	20	1,107	1.8	(1.0-3.1)
Other	33	1,722	4.2	(2.7-6.5)
Parity				
No previous live birth	14	914	2.3**	(1.2-4.4)
1	14	622	2.0**	(1.0-3.7)
2+	25	1,293	4.2	(2.6-6.8)
Last Year's Household Income				
<\$16,000	10	403	2.2**	(1.1-4.6)
\$16,001-\$24,000	8	396	3.2**	(1.3-7.6)
\$24,001-\$40,000	9	381	2.8**	(1.3-5.9)
\$40,001-\$60,000	*	*	*	*
\$60,001+	13	871	2.2**	(1.1-4.4)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 45. Prevalence of opioid pain reliever usage during pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	40	2,038	2.0	(1.3-3.0)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	23	1,169	2.2	(1.2-3.8)
30+ Years	16	848	1.9**	(1.1-3.5)
Race/Ethnicity				
White, non-Hispanic	14	1,240	1.8**	(1.0-3.4)
Black, non-Hispanic	24	749	4.0	(2.6-6.0)
Hispanic	0	0	0.0	
Asian/Pacific Islander, non-Hispanic	0	0	0.0	
Other, non-Hispanic	*	*	*	*
Education				
<High School	7	154	1.4**	(0.7-3.1)
HS Grad/GED	14	531	2.1**	(1.0-4.3)
Some College	10	676	2.3**	(1.0-5.2)
College Degree+	9	677	1.9**	(0.9-3.8)
Pregnancy Insurance Status				
Medicaid/Public	20	740	2.1	(1.1-3.7)
Private	14	1,032	1.7**	(0.9-3.3)
Marital Status				
Married	16	968	1.6**	(0.8-2.9)
Other	24	1,070	2.6	(1.5-4.6)
Parity				
No previous live birth	9	554	1.4**	(0.5-3.4)
1	11	635	2.0**	(1.0-4.1)
2+	20	850	2.8	(1.5-4.9)
Last Year's Household Income				
<\$16,000	12	547	3.0**	(1.3-6.9)
\$16,001-\$24,000	6	172	1.4**	(0.6-3.1)
\$24,001-\$40,000	8	522	3.8**	(1.6-9.1)
\$40,001-\$60,000	*	*	*	*
\$60,001+	8	633	1.6**	(0.7-3.4)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 46. Prevalence of opioid pain reliever usage after pregnancy by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	260	18,619	18.1	(15.8-20.8)
Maternal Age				
<20 Years	8	688	17.1**	(7.1-35.7)
20-29 Years	117	8,686	15.9	(12.8-19.5)
30+ Years	135	9,246	21.0	(17.4-25.2)
Race/Ethnicity				
White, non-Hispanic	144	13,293	19.5	(16.4-23.1)
Black, non-Hispanic	89	2,975	15.9	(13.0-19.5)
Hispanic	15	1,427	18.3	(10.1-30.7)
Asian/Pacific Islander, non-Hispanic	6	476	18.6**	(7.7-38.4)
Other, non-Hispanic	*	*	*	*
Education				
<High School	20	1,394	13.1	(7.3-22.5)
HS Grad/GED	56	4,092	16.1	(11.6-22.0)
Some College	87	5,299	18.0	(14.1-22.8)
College Degree+	94	7,477	20.4	(16.4-25.0)
Post Pregnancy Insurance Status				
Uninsured	13	941	18.3**	(9.5-32.5)
Medicaid/Public	103	6,540	19.0	(14.9-23.9)
Private	135	10,616	17.8	(14.8-21.3)
Marital Status				
Married	157	12,044	19.5	(16.4-23.0)
Other	103	6,576	16.1	(12.6-20.3)
Parity				
No previous live birth	70	5,456	13.6	(10.4-17.5)
1	96	6,143	19.5	(15.4-24.3)
2+	94	7,020	22.7	(18.0-28.2)
Last Year's Household Income				
<\$16,000	38	2,039	11.1	(7.3-16.6)
\$16,001-\$24,000	31	2,188	17.5	(11.1-26.4)
\$24,001-\$40,000	39	2,688	19.8	(13.4-28.2)
\$40,001-\$60,000	34	2,413	18.5	(12.3-26.8)
\$60,001+	101	8,610	21.7	(17.7-26.3)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 47. Distribution of delivery methods,
MI PRAMS, 2019**

Method	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Vaginal	854	68,760	65.9	(62.8-68.8)
First C-section	320	20,715	19.8	(17.4-22.5)
Repeat C-section	190	12,721	12.2	(10.3-14.4)
Vacuum delivery	22	1,728	1.7	(1.0-2.7)
Forceps delivery	*	*	*	*

*Data not shown due to small sample size and/or relative standard error > 50%.

Table 48. Prevalence of low birthweight[^] by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	288	8,174	7.8	(7.6-8.1)
Maternal Age				
<20 Years	11	430	10.3**	(5.4-18.6)
20-29 Years	143	4,290	7.7	(6.8-8.8)
30+ Years	134	3,454	7.7	(6.7-8.8)
Race/Ethnicity				
White, non-Hispanic	164	4,127	6.0	(5.4-6.7)
Black, non-Hispanic	75	2,821	14.4	(12.1-17.0)
Hispanic	20	511	6.5	(4.0-10.2)
Asian/Pacific Islander, non-Hispanic	6	149	5.6**	(2.4-12.5)
Other, non-Hispanic	20	491	9.7	(5.9-15.6)
Education				
<High School	27	1,030	9.5	(6.4-13.8)
HS Grad/GED	83	2,460	9.5	(7.7-11.7)
Some College	92	2,512	8.4	(6.9-10.1)
College Degree+	81	2,019	5.4	(4.5-6.6)
Pregnancy Insurance Status				
Medicaid/Public	118	3,665	9.8	(8.4-11.5)
Private	146	3,854	6.4	(5.6-7.2)
Marital Status				
Married	155	3,803	6.1	(5.5-6.8)
Other	133	4,371	10.4	(9.0-12.0)
Parity				
No previous live birth	119	3,475	8.5	(7.2-9.9)
1	78	2,064	6.5	(5.3-8.0)
2+	91	2,635	8.3	(6.9-10.0)
Last Year's Household Income				
<\$16,000	61	2,043	11.1	(8.6-14.2)
\$16,001-\$24,000	33	1,016	8.0	(5.6-11.4)
\$24,001-\$40,000	44	1,187	8.7	(6.4-11.8)
\$40,001-\$60,000	32	829	6.3	(4.4-9.0)
\$60,001+	84	1,982	5.0	(4.1-6.0)

[^]Low birthweight infants are defined by the World Health Organization as infants weighing less than 2,500 grams at birth.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 49. Distribution of low birthweight subcategories[^] among low birthweight infants, MI PRAMS, 2019

Low birthweight subcategory	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total prevalence	288	8,174	100.0	288
Very low birthweight	54	1,493	18.3	(14.1-23.3)
Moderately low birthweight	234	6,681	81.7	(76.7-85.9)

[^]Very low birthweight = birthweight < 1,500g; moderately low birthweight = 1,500g <= birthweight <2,500g

Table 50. Prevalence of low birthweight[^] by smoking status during last three months of pregnancy, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	283	8,014	7.7	(7.4-8.0)
Smoking status				
Did not smoke in last 3 months of pregnancy	236	6,601	7.1	(6.7-7.6)
Smoked last 3 months of pregnancy	47	1,413	12.6	(9.2-17.1)

[^]Low birthweight infants are defined by the World Health Organization as infants weighing less than 2,500 grams at birth.

Table 51. Prevalence of high birthweight[^] by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	92	9,446	9.0	(7.2-11.2)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	50	5,545	10.0	(7.4-13.3)
30+ Years	38	3,461	7.7	(5.5-10.8)
Race/Ethnicity				
White, non-Hispanic	49	6,719	9.8	(7.4-12.8)
Black, non-Hispanic	30	1,030	5.3	(3.6-7.5)
Hispanic	7	866	11.0**	(5.3-21.5)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	12	1,583	14.5**	(7.9-25.3)
HS Grad/GED	23	2,106	8.1	(4.9-13.2)
Some College	24	2,207	7.3	(4.8-11.1)
College Degree+	32	3,509	9.5	(6.7-13.2)
Pregnancy Insurance Status				
Medicaid/Public	31	2,632	7.1	(4.6-10.7)
Private	58	6,517	10.8	(8.3-13.9)
Marital Status				
Married	52	6,043	9.7	(7.4-12.6)
Other	40	3,403	8.1	(5.5-11.8)
Parity				
No previous live birth	31	3,493	8.5	(5.9-12.2)
1	30	3,267	10.3	(7.0-14.8)
2+	31	2,686	8.5	(5.7-12.4)
Last Year's Household Income				
<\$16,000	16	1,565	8.5	(4.7-15.0)
\$16,001-\$24,000	8	768	6.1**	(2.7-13.1)
\$24,001-\$40,000	18	1,605	11.8	(6.9-19.5)
\$40,001-\$60,000	12	1,298	9.9	(5.5-17.3)
\$60,001+	30	3,505	8.8	(6.2-12.4)

[^]High birthweight infants are defined by the World Health Organization as infants weighing more than 4,000 grams at birth.

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 52. Prevalence of high birthweight[^] by diabetes before pregnancy or gestational diabetes, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	88	9,180	9.0	(7.2-11.3)
Diabetes status				
No diabetes before or during pregnancy	70	7,419	8.2	(6.4-10.6)
Diabetes before pregnancy	*	*	*	*
Gestational diabetes	13	1,333	15.5	(8.5-26.5)

[^]High birthweight infants are defined by the World Health Organization as infants weighing more than 4,000 grams at birth.

*Data not shown due to small sample size and/or relative standard error > 50%.

Table 53. Distribution of infant birthweights and gestational ages[^], MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Infant both low birthweight and preterm	191	5,292	5.1	(4.6-5.5)
Infant low birthweight and term	97	2,881	2.8	(2.3-3.3)
Infant not low birthweight, yes preterm	49	4,317	4.1	(3.0-5.7)
Infant not low birthweight, yes term	1,055	92,026	88.0	(86.6-89.3)

[^]Low birthweight infants are defined by the World Health Organization as infants weighing less than 2,500 grams at birth; preterm birth is defined by the World Health Organization as the birth of an infant before 37 weeks of pregnancy. Gestational weeks is obtained from the Michigan birth certificate - obstetric estimate of gestation variable.

Table 54. Prevalence of preterm birth by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	240	9,610	9.2	(7.9-10.7)
Maternal Age				
<20 Years	10	570	13.6**	(5.9-28.3)
20-29 Years	112	4,654	8.4	(6.6-10.6)
30+ Years	118	4,386	9.8	(7.8-12.2)
Race/Ethnicity				
White, non-Hispanic	138	5,733	8.3	(6.7-10.4)
Black, non-Hispanic	64	2,299	11.7	(9.4-14.6)
Hispanic	18	562	7.1	(3.9-12.6)
Asian/Pacific Islander, non-Hispanic	7	483	18.1**	(7.8-36.7)
Other, non-Hispanic	11	352	7.0**	(3.2-14.4)
Education				
<High School	21	1,034	9.5	(5.6-15.7)
HS Grad/GED	71	2,894	11.2	(8.2-15.1)
Some College	72	2,394	8.0	(6.0-10.5)
College Degree+	72	3,159	8.5	(6.3-11.4)
Pregnancy Insurance Status				
Medicaid/Public	91	3,176	8.5	(6.7-10.9)
Private	123	5,135	8.5	(6.8-10.6)
Marital Status				
Married	136	5,315	8.5	(6.9-10.5)
Other	104	4,295	10.2	(8.0-12.9)
Parity				
No previous live birth	93	3,979	9.7	(7.4-12.6)
1	66	2,398	7.5	(5.5-10.2)
2+	81	3,233	10.2	(7.8-13.2)
Last Year's Household Income				
<\$16,000	44	1,965	10.7	(7.2-15.6)
\$16,001-\$24,000	32	1,252	9.9	(6.4-15.1)
\$24,001-\$40,000	29	847	6.2	(4.1-9.4)
\$40,001-\$60,000	31	1,143	8.7	(5.5-13.7)
\$60,001+	78	3,452	8.7	(6.5-11.5)

Preterm birth is defined by the World Health Organization as the birth of an infant before 37 weeks of pregnancy. Gestational weeks is obtained from the Michigan birth certificate - obstetric estimate of gestation variable.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 55. Breastfeeding duration categories,
MI PRAMS, 2019**

Breastfeeding duration categories	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Did not breastfeed	215	12,869	12.7	(10.7-14.9)
Breastfed at least 4 weeks	957	76,866	75.5	(72.6-78.2)
Breastfed at least 8 weeks	816	67,118	65.9	(62.8-69.0)
Breastfed at least 12 weeks	649	55,374	58.6	(55.2-61.8)

**Table 56. Reasons for not initiating breastfeeding,
MI PRAMS, 2019**

Reasons for not initiating breastfeeding	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Reasons (non-exclusive)				
Mom did not want to breastfeed	111	6,288	44.5	(36.4-52.9)
Mom did not like breastfeeding	66	3,180	22.5	(16.6-29.8)
Mom had other children to take care of	57	3,105	22.0	(16.1-29.3)
Mom returned to work	45	2,850	20.2	(14.2-27.8)
Mom was sick or on medicine	40	2,838	20.1	(13.7-28.4)
Mom had too many other household duties	41	1,966	14.0	(9.3-20.5)
Mom tried but it was too hard	37	1,773	12.6	(8.4-18.4)
Baby was in the hospital	17	693	4.9	(2.7-8.7)
Mom returned to school	7	224	1.6**	(0.7-3.4)
Other	36	2,231	15.8	(10.6-22.9)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 57. Cumulative number of reasons for not initiating breastfeeding,
MI PRAMS, 2019**

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-1 reason	120	8,149	57.7	(49.3-65.7)
2 reasons	43	2,635	18.7	(12.8-26.3)
3 reasons	29	1,432	10.1	(6.6-15.3)
4+ reasons	38	1,909	13.5	(8.9-20.1)

Table 58. Prevalence of breastfeeding initiation by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,123	88,817	87.3	(85.1-89.3)
Maternal Age				
<20 Years	45	3,327	86.2	(76.7-92.2)
20-29 Years	578	46,025	85.2	(81.6-88.1)
30+ Years	500	39,465	90.1	(87.2-92.5)
Race/Ethnicity				
White, non-Hispanic	572	60,869	90.2	(87.1-92.6)
Black, non-Hispanic	402	13,311	72.0	(67.8-75.8)
Hispanic	68	6,960	92.8**	(82.9-97.2)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	91	7,384	70.0	(59.7-78.6)
HS Grad/GED	262	20,084	81.9	(76.4-86.4)
Some College	370	26,158	88.3	(84.1-91.6)
College Degree+	393	34,688	95.4	(92.7-97.1)
Post Pregnancy Insurance Status				
Uninsured	55	4,211	86.6**	(70.9-94.5)
Medicaid/Public	400	26,989	79.4	(74.7-83.4)
Private	628	54,208	91.6	(89.0-93.7)
Marital Status				
Married	658	57,202	93.1	(90.6-95.0)
Other	465	31,614	78.5	(74.2-82.3)
Parity				
No previous live birth	439	36,686	92.1	(89.0-94.4)
1	342	26,471	85.2	(80.6-88.8)
2+	342	25,659	83.4	(78.7-87.1)
Last Year's Household Income				
<\$16,000	211	13,512	76.5	(69.5-82.4)
\$16,001-\$24,000	136	10,022	81.9	(73.6-88.0)
\$24,001-\$40,000	147	10,886	81.9	(73.6-88.0)
\$40,001-\$60,000	143	12,103	92.7**	(87.1-96.0)
\$60,001+	400	36,967	94.3	(91.3-96.3)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 59. Prevalence of 1-month breastfeeding duration by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	957	76,866	75.5	(72.6-78.2)
Maternal Age				
<20 Years	31	2,273	58.9	(42.1-73.8)
20-29 Years	482	39,358	72.8	(68.5-76.7)
30+ Years	444	35,235	80.3	(76.2-83.8)
Race/Ethnicity				
White, non-Hispanic	507	53,916	79.9	(76.0-83.3)
Black, non-Hispanic	322	10,528	56.9	(52.5-61.3)
Hispanic	56	5,319	70.9	(56.8-81.9)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	42	4,218	84.2**	(67.8-93.1)
Education				
<High School	70	5,735	54.3	(43.4-64.8)
HS Grad/GED	207	15,696	64.0	(57.0-70.5)
Some College	311	22,368	75.5	(70.2-80.2)
College Degree+	364	32,767	89.8	(86.3-92.5)
Post Pregnancy Insurance Status				
Uninsured	44	3,659	75.3	(59.8-86.2)
Medicaid/Public	318	21,137	62.1	(56.5-67.5)
Private	560	48,969	82.6	(79.1-85.6)
Marital Status				
Married	601	52,920	86.0	(82.8-88.7)
Other	356	23,946	59.5	(54.2-64.5)
Parity				
No previous live birth	367	31,087	77.8	(73.1-82.0)
1	299	23,859	76.8	(71.6-81.2)
2+	291	21,920	71.2	(65.5-76.3)
Last Year's Household Income				
<\$16,000	163	10,438	59.1	(51.3-66.5)
\$16,001-\$24,000	109	7,889	64.5	(54.5-73.3)
\$24,001-\$40,000	125	9,347	70.3	(61.0-78.2)
\$40,001-\$60,000	127	10,606	81.3	(72.9-87.5)
\$60,001+	370	34,825	88.6	(84.9-91.4)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 60. Prevalence of 2-month breastfeeding duration by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	816	67,118	65.9	(62.8-69.0)
Maternal Age				
<20 Years	26	1,731	44.8	(28.8-62.0)
20-29 Years	404	33,749	62.4	(57.9-66.8)
30+ Years	386	31,637	72.1	(67.6-76.2)
Race/Ethnicity				
White, non-Hispanic	444	47,600	70.5	(66.3-74.4)
Black, non-Hispanic	257	8,335	45.1	(40.7-49.5)
Hispanic	49	4,805	64.1	(50.1-76.0)
Asian/Pacific Islander, non-Hispanic	22	2,166	81.2**	(61.3-92.1)
Other, non-Hispanic	38	3,711	74.1	(57.4-85.8)
Education				
<High School	58	4,726	44.8	(34.2-55.9)
HS Grad/GED	163	12,587	51.3	(44.2-58.4)
Some College	248	18,260	61.7	(55.9-67.1)
College Degree+	344	31,432	86.2	(82.2-89.3)
Post Pregnancy Insurance Status				
Uninsured	37	3,029	62.3	(46.3-76.0)
Medicaid/Public	247	16,361	48.1	(42.4-53.8)
Private	499	44,866	75.7	(71.8-79.1)
Marital Status				
Married	541	48,654	79.1	(75.4-82.3)
Other	275	18,463	45.9	(40.6-51.2)
Parity				
No previous live birth	318	27,232	68.2	(63.0-73.0)
1	253	20,596	66.3	(60.6-71.5)
2+	245	19,290	62.7	(56.8-68.2)
Last Year's Household Income				
<\$16,000	130	8,688	49.2	(41.4-57.1)
\$16,001-\$24,000	84	6,076	49.7	(39.8-59.5)
\$24,001-\$40,000	98	7,401	55.7	(46.1-64.8)
\$40,001-\$60,000	112	9,413	72.1	(62.9-79.8)
\$60,001+	339	32,390	82.4	(78.1-85.9)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 61. Prevalence of 3-month breastfeeding duration by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	649	55,374	58.6	(55.2-61.8)
Maternal Age				
<20 Years	18	1,125	34.3	(19.6-52.8)
20-29 Years	305	26,781	53.0	(48.2-57.8)
30+ Years	326	27,468	67.4	(62.6-71.8)
Race/Ethnicity				
White, non-Hispanic	364	39,741	64.9	(60.3-69.2)
Black, non-Hispanic	189	6,071	34.2	(30.1-38.6)
Hispanic	38	3,924	52.5	(39.1-65.5)
Asian/Pacific Islander, non-Hispanic	19	2,008	81.9**	(62.0-92.6)
Other, non-Hispanic	33	3,128	62.4	(45.7-76.6)
Education				
<High School	38	3,273	35.4	(24.9-47.5)
HS Grad/GED	116	9,533	41.0	(34.0-48.5)
Some College	188	13,997	51.0	(45.0-57.1)
College Degree+	304	28,457	83.3	(79.0-86.9)
Post Pregnancy Insurance Status				
Uninsured	28	2,300	49.3	(33.8-65.0)
Medicaid/Public	175	11,963	38.0	(32.4-43.9)
Private	421	39,047	71.1	(67.0-74.9)
Marital Status				
Married	455	42,023	74.2	(70.2-77.8)
Other	194	13,351	35.2	(30.1-40.7)
Parity				
No previous live birth	249	22,249	61.9	(56.4-67.2)
1	200	17,346	58.2	(52.2-63.9)
2+	200	15,778	54.8	(48.6-60.8)
Last Year's Household Income				
<\$16,000	91	6,249	37.4	(29.9-45.6)
\$16,001-\$24,000	61	4,428	38.2	(28.8-48.6)
\$24,001-\$40,000	69	5,339	45.6	(35.9-55.6)
\$40,001-\$60,000	92	7,817	65.4	(55.5-74.1)
\$60,001+	296	28,796	79.2	(74.6-83.1)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 62. Reasons for stopping breastfeeding,
MI PRAMS, 2019**

Reasons (non-exclusive)	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Was not producing enough milk	294	20,046	54.7	(49.2-60.1)
Breastmilk did not satisfy baby	173	13,964	38.2	(32.9-43.8)
Baby had difficulty nursing or latching	188	13,264	36.2	(31.1-41.6)
Went back to work	122	7,343	20.0	(16.2-24.6)
Nipples were sore, cracked, or bleeding	110	7,291	19.9	(15.9-24.6)
Baby was not gaining weight	85	7,036	19.2	(15.0-24.2)
Too many household duties	94	6,299	17.2	(13.5-21.8)
It was right time to stop	67	4,674	12.8	(9.5-16.9)
I was sick	44	3,555	9.7	(6.7-13.8)
Baby was jaundiced	35	2,545	6.9	(4.6-10.4)
Went back to school	13	741	2.0**	(1.0-4.0)
Partner did not support	8	576	1.6	(0.6-4.0)
Other	73	5,415	14.8	(11.2-19.2)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 63. Breastfeeding information sources before or after delivery,
MI PRAMS, 2019**

Breastfeeding information source	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Information sources (non-exclusive)				
Mom's doctor	1,065	79,537	79.1	(76.2-81.7)
Nurse or midwife	1,016	77,177	77.3	(74.3-80.0)
Breastfeeding or lactation specialist	967	72,100	72.0	(68.8-74.9)
Baby's doctor	904	67,568	68.3	(65.1-71.4)
Family or friends	796	61,979	62.1	(58.9-65.3)
Breastfeeding support group	349	22,900	23.3	(20.7-26.2)
Hotline or toll-free number	150	9,789	10.0	(8.2-12.1)
Other	129	8,775	11.2	(9.1-13.8)

**Table 64. Total number of breastfeeding information sources,
MI PRAMS, 2019**

Number of sources of breastfeeding information	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0	40	2,771	2.7	(1.9-4.0)
1	81	6,934	6.8	(5.3-8.7)
2	147	12,361	12.1	(10.1-14.6)
3	208	15,198	14.9	(12.7-17.4)
4	314	24,763	24.3	(21.6-27.3)
5	302	22,977	22.6	(19.9-25.4)
6	156	10,601	10.4	(8.6-12.5)
7	69	5,054	5.0	(3.7-6.6)
8	24	1,207	1.2	(0.7-2.0)

**Table 65. Did mother ever use a breast pump,
MI PRAMS, 2019**

Breast pump usage	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Yes	1,002	80,002	91.2	(89.0-93.0)
No	110	7,699	8.8	(7.0-11.0)

**Table 66. Source of breast pump,
MI PRAMS, 2019**

Source of breast pump	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Breast pump source (non-exclusive)				
Free from hospital	354	24,285	29.6	(26.4-33.0)
Bought new from store or online	205	17,291	21.1	(18.2-24.2)
Had one from previous child	127	11,022	13.4	(11.1-16.2)
Previously used by someone else	59	4,546	5.5	(4.1-7.5)
New from WIC	60	4,097	5.0	(3.6-6.9)
Bought new from hospital or doctor's office	52	3,908	4.8	(3.4-6.6)
New as a gift	48	3,578	4.4	(3.1-6.1)
Rented from hospital or doctor's office	19	1,074	1.3	(0.7-2.3)
Other	348	29,346	35.7	(32.3-39.4)

Table 67. Prevalence of ever using a breast pump by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,002	80,002	91.2	(89.0-93.0)
Maternal Age				
<20 Years	39	2,941	88.4**	(72.6-95.6)
20-29 Years	509	40,990	90.4	(87.0-92.9)
30+ Years	454	36,071	92.5	(89.1-94.8)
Race/Ethnicity				
White, non-Hispanic	533	56,362	93.5	(90.7-95.5)
Black, non-Hispanic	339	11,185	85.2	(81.1-88.5)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	21	1,910	78.5**	(55.9-91.3)
Other, non-Hispanic	42	3,938	85.3**	(68.6-93.9)
Education				
<High School	70	5,855	79.3	(66.8-87.9)
HS Grad/GED	217	16,611	85.1	(78.5-89.9)
Some College	336	24,211	93.3	(89.7-95.7)
College Degree+	373	32,862	95.7	(92.7-97.5)
Post Pregnancy Insurance Status				
Uninsured	48	3,547	84.2**	(66.9-93.4)
Medicaid/Public	337	22,696	86.4	(81.4-90.2)
Private	584	50,953	94.5	(92.1-96.2)
Marital Status				
Married	597	52,027	91.9	(89.1-94.1)
Other	405	27,975	89.9	(85.8-92.9)
Parity				
No previous live birth	407	34,459	95.2	(92.4-97.0)
1	312	24,297	92.4	(88.2-95.2)
2+	283	21,246	84.3	(78.7-88.6)
Last Year's Household Income				
<\$16,000	171	11,267	83.6	(76.0-89.1)
\$16,001-\$24,000	116	8,777	89.9**	(82.1-94.5)
\$24,001-\$40,000	132	9,391	87.5**	(77.7-93.3)
\$40,001-\$60,000	132	11,083	93.4**	(86.6-96.9)
\$60,001+	383	35,167	95.7	(92.7-97.5)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 68. Baby health indicators,
MI PRAMS, 2019**

Health indicators	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Baby got breast milk from source other than mom	153	9,276	9.2	(7.5-11.2)
Baby has a doctor, nurse, or medical practice where he or she is seen on a regular basis	1,202	92,837	92.3	(90.3-93.9)
Baby will see a dentist by his or her first birthday	908	65,694	67.1	(63.9-70.2)

**Table 69. Distribution of WIC status during pregnancy,
MI PRAMS, 2019**

WIC status	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
No [^]	768	66,462	64.7	(61.6-67.7)
Yes	602	36,275	35.3	(32.3-38.4)

[^] This variable is for any WIC participation. Women in the "no" category may or may not have qualified for WIC during pregnancy.

**Table 70. How often infant slept alone in his/her own bed over last two weeks,
MI PRAMS, 2019**

Baby sleep - alone	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Always	799	65,017	64.2	(61.0-67.3)
Often/Almost always	240	16,215	16.0	(13.8-18.5)
Sometimes	136	9,259	9.1	(7.4-11.2)
Rarely	65	4,510	4.5	(3.3-6.0)
Never	84	6,214	6.1	(4.7-8.0)

**Table 71. Infant slept in his/her own crib or bed in mother's room,
MI PRAMS, 2019**

Baby in room with mom	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Yes	1,007	73,882	78.4	(75.4-81.1)
No	224	20,331	21.6	(18.9-24.6)

**Table 72. Infant sleep space characteristics,
MI PRAMS, 2019**

Baby sleep space	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Characteristics (non-exclusive)				
Crib/bassinet	1,207	91,866	91.0	(88.9-92.8)
Sleep sack/wearable blanket	516	45,038	45.4	(42.1-48.8)
Car seat/swing	536	42,493	42.9	(39.6-46.3)
With blanket	450	32,145	32.5	(29.5-35.8)
Mattress/bed	330	22,482	22.8	(20.2-25.7)
Couch/sofa	114	8,334	8.5	(6.8-10.6)
With bumper pads	105	7,736	7.9	(6.3-9.8)
With toys, cushions, pillows	83	5,708	5.8	(4.4-7.6)

**Table 73. Primary infant sleep position,
MI PRAMS, 2019**

Primary infant sleep position	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Back	1,081	85,912	84.9	(82.5-87.0)
Side	90	6,831	6.8	(5.2-8.7)
Stomach	89	5,347	5.3	(4.1-6.8)
Side/Back	28	1,427	1.4	(0.8-2.3)
Side/Stomach	*	*	*	*
Back/Stomach	*	*	*	*
All 3 Positions	22	969	1.0	(0.6-1.6)

*Data not shown due to small sample size and/or relative standard error > 50%.

Table 74. Prevalence of infant always or often sleeping alone in his/her own crib or bed in the last two weeks by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,039	81,232	80.3	(77.5-82.8)
Maternal Age				
<20 Years	41	2,541	66.2	(48.2-80.4)
20-29 Years	530	42,269	78.8	(74.7-82.3)
30+ Years	468	36,422	83.3	(79.4-86.6)
Race/Ethnicity				
White, non-Hispanic	526	55,977	83.3	(79.7-86.4)
Black, non-Hispanic	388	13,162	71.9	(67.7-75.6)
Hispanic	60	5,743	76.8	(63.1-86.5)
Asian/Pacific Islander, non-Hispanic	17	1,558	59.5	(38.9-77.2)
Other, non-Hispanic	41	4,165	83.1**	(67.6-92.1)
Education				
<High School	108	7,542	71.6	(60.7-80.5)
HS Grad/GED	270	19,489	79.8	(73.3-85.0)
Some College	327	23,807	81.2	(76.2-85.3)
College Degree+	326	29,851	82.3	(77.9-86.0)
Post Pregnancy Insurance Status				
Uninsured	46	3,851	79.6	(65.7-88.9)
Medicaid/Public	418	26,311	77.6	(72.3-82.0)
Private	541	48,093	81.8	(78.2-84.8)
Marital Status				
Married	573	51,082	83.7	(80.3-86.6)
Other	466	30,150	75.0	(70.2-79.3)
Parity				
No previous live birth	369	30,791	77.8	(73.0-81.9)
1	322	25,635	82.6	(77.7-86.7)
2+	348	24,806	81.1	(75.9-85.4)
Last Year's Household Income				
<\$16,000	220	13,903	79.0	(72.0-84.7)
\$16,001-\$24,000	133	9,748	79.8	(71.4-86.2)
\$24,001-\$40,000	134	9,921	74.8	(65.3-82.4)
\$40,001-\$60,000	117	9,535	73.4	(64.0-81.0)
\$60,001+	350	33,295	85.3	(81.2-88.6)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 75. Prevalence of infant sleeping alone in his/her own crib or bed in the same room as mother by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,007	73,882	78.4	(75.4-81.1)
Maternal Age				
<20 Years	47	2,719	78.0**	(57.8-90.2)
20-29 Years	542	40,526	80.9	(76.6-84.5)
30+ Years	418	30,638	75.4	(70.8-79.5)
Race/Ethnicity				
White, non-Hispanic	426	45,829	73.6	(69.5-77.4)
Black, non-Hispanic	455	15,468	90.8	(87.8-93.1)
Hispanic	62	6,352	89.5**	(77.7-95.5)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	38	3,661	75.4**	(58.4-87.0)
Education				
<High School	125	8,850	92.8**	(82.4-97.3)
HS Grad/GED	290	19,569	85.2	(78.5-90.1)
Some College	324	22,577	82.6	(77.4-86.9)
College Degree+	259	22,310	66.1	(60.6-71.2)
Post Pregnancy Insurance Status				
Uninsured	49	3,713	76.8**	(60.3-87.8)
Medicaid/Public	466	29,160	92.6	(88.5-95.3)
Private	451	37,600	69.2	(64.9-73.2)
Marital Status				
Married	491	42,239	73.8	(69.8-77.5)
Other	516	31,643	85.5	(80.7-89.3)
Parity				
No previous live birth	355	27,392	74.0	(68.8-78.7)
1	299	22,143	76.9	(71.3-81.8)
2+	353	24,347	85.7	(80.6-89.6)
Last Year's Household Income				
<\$16,000	240	14,190	86.5	(78.9-91.7)
\$16,001-\$24,000	152	10,276	88.1**	(78.8-93.7)
\$24,001-\$40,000	149	10,692	84.3	(75.3-90.4)
\$40,001-\$60,000	113	9,338	81.7	(72.9-88.1)
\$60,001+	265	24,338	67.5	(62.2-72.3)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 76. Prevalence of infant usually sleeping in a crib^ by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,207	91,866	91.0	(88.9-92.8)
Maternal Age				
<20 Years	52	3,383	88.1**	(71.7-95.6)
20-29 Years	634	49,068	91.4	(88.3-93.7)
30+ Years	521	39,415	90.9	(87.5-93.4)
Race/Ethnicity				
White, non-Hispanic	578	61,168	91.4	(88.5-93.6)
Black, non-Hispanic	487	16,485	90.4	(87.5-92.7)
Hispanic	67	6,937	92.8**	(83.1-97.1)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	44	4,246	84.7**	(68.8-93.3)
Education				
<High School	127	9,238	87.9**	(78.5-93.5)
HS Grad/GED	323	22,479	92.0	(86.6-95.3)
Some College	380	26,954	92.8	(89.2-95.2)
College Degree+	367	32,564	89.8	(86.0-92.6)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	496	31,019	91.5	(87.3-94.4)
Private	615	53,036	90.3	(87.4-92.6)
Marital Status				
Married	636	55,666	91.4	(88.6-93.5)
Other	571	36,200	90.5	(86.7-93.2)
Parity				
No previous live birth	440	35,567	90.0	(86.4-92.8)
1	369	28,573	92.3	(88.4-94.9)
2+	398	27,725	91.0	(86.6-94.1)
Last Year's Household Income				
<\$16,000	273	16,814	95.3**	(90.9-97.7)
\$16,001-\$24,000	159	11,047	90.6**	(82.6-95.2)
\$24,001-\$40,000	162	11,936	90.0**	(82.3-94.5)
\$40,001-\$60,000	140	11,465	88.2	(80.2-93.2)
\$60,001+	381	35,358	90.5	(86.9-93.2)

^Wording in question is "crib, bassinet, or pack and play".

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 77. Prevalence of infant usually sleeping on an adult-sized mattress
by maternal characteristics, MI PRAMS, 2019**

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	330	22,482	22.8	(20.2-25.7)
Maternal Age				
<20 Years	26	1,294	34.1	(20.7-50.6)
20-29 Years	187	13,437	25.7	(21.8-30.0)
30+ Years	117	7,751	18.3	(14.8-22.4)
Race/Ethnicity				
White, non-Hispanic	88	10,868	16.5	(13.4-20.2)
Black, non-Hispanic	196	6,543	37.5	(33.2-42.0)
Hispanic	18	2,003	27.4	(17.0-41.1)
Asian/Pacific Islander, non-Hispanic	10	1,154	47.9	(28.4-68.1)
Other, non-Hispanic	18	1,913	39.4	(24.7-56.2)
Education				
<High School	46	2,968	28.8	(20.1-39.5)
HS Grad/GED	101	6,465	26.9	(21.1-33.6)
Some College	96	6,348	22.4	(17.8-27.7)
College Degree+	84	6,558	18.6	(14.8-23.2)
Post Pregnancy Insurance Status				
Uninsured	23	1,915	39.9	(25.8-56.0)
Medicaid/Public	151	8,525	25.6	(21.0-30.8)
Private	144	11,127	19.5	(16.3-23.2)
Marital Status				
Married	132	11,455	19.3	(16.1-23.0)
Other	198	11,027	28.2	(23.8-33.1)
Parity				
No previous live birth	123	8,500	22.4	(18.3-27.2)
1	107	7,804	25.7	(20.8-31.3)
2+	100	6,177	20.5	(16.1-25.7)
Last Year's Household Income				
<\$16,000	70	3,410	19.8	(14.6-26.1)
\$16,001-\$24,000	60	3,718	31.2	(22.8-41.0)
\$24,001-\$40,000	52	3,805	29.3	(21.2-38.8)
\$40,001-\$60,000	42	3,598	28.1	(20.3-37.5)
\$60,001+	64	5,655	14.9	(11.5-19.1)

Table 78. Prevalence of infant usually sleeping on a couch, sofa, or armchair by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	114	8,334	8.5	(6.8-10.6)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	60	4,115	7.9	(5.7-10.7)
30+ Years	49	3,909	9.2	(6.6-12.7)
Race/Ethnicity				
White, non-Hispanic	44	5,139	7.8	(5.7-10.6)
Black, non-Hispanic	59	1,950	11.2	(8.6-14.3)
Hispanic	8	1,040	14.4**	(7.0-27.2)
Asian/Pacific Islander, non-Hispanic	0	0	0.0	
Other, non-Hispanic	*	*	*	*
Education				
<High School	10	798	7.7**	(3.3-17.1)
HS Grad/GED	31	2,216	9.3	(5.9-14.4)
Some College	39	2,888	10.2	(7.0-14.5)
College Degree+	34	2,432	6.9	(4.7-10.1)
Post Pregnancy Insurance Status				
Uninsured	6	420	8.7**	(3.2-21.7)
Medicaid/Public	47	3,163	9.5	(6.6-13.5)
Private	56	4,146	7.3	(5.4-9.8)
Marital Status				
Married	49	3,934	6.6	(4.8-9.0)
Other	65	4,400	11.4	(8.3-15.4)
Parity				
No previous live birth	42	3,197	8.4	(5.9-12.0)
1	39	2,440	8.1	(5.4-11.8)
2+	33	2,697	8.9	(5.9-13.3)
Last Year's Household Income				
<\$16,000	29	1,603	9.3	(5.7-14.6)
\$16,001-\$24,000	12	830	7.1**	(3.4-14.0)
\$24,001-\$40,000	20	1,564	12.1	(6.9-20.4)
\$40,001-\$60,000	15	1,292	10.1**	(5.5-17.8)
\$60,001+	31	2,567	6.8	(4.6-9.9)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 79. Prevalence of infant usually sleeping in an infant car seat or swing
by maternal characteristics, MI PRAMS, 2019**

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	536	42,493	42.9	(39.6-46.3)
Maternal Age				
<20 Years	26	1,467	38.2	(23.4-55.6)
20-29 Years	276	22,744	43.1	(38.5-47.9)
30+ Years	234	18,282	43.0	(38.2-48.0)
Race/Ethnicity				
White, non-Hispanic	274	29,028	43.8	(39.5-48.2)
Black, non-Hispanic	196	6,417	36.6	(32.4-41.0)
Hispanic	33	3,782	52.5	(39.0-65.6)
Asian/Pacific Islander, non-Hispanic	10	1,019	42.0	(23.5-63.1)
Other, non-Hispanic	21	2,067	41.4	(26.9-57.7)
Education				
<High School	63	4,390	42.3	(31.8-53.5)
HS Grad/GED	120	9,560	40.2	(33.2-47.5)
Some College	172	12,439	43.4	(37.5-49.4)
College Degree+	176	15,697	44.1	(38.8-49.6)
Post Pregnancy Insurance Status				
Uninsured	28	2,299	49.6	(34.0-65.3)
Medicaid/Public	212	14,275	42.6	(37.0-48.5)
Private	282	24,895	43.2	(38.9-47.6)
Marital Status				
Married	288	25,609	42.8	(38.6-47.1)
Other	248	16,884	43.0	(37.7-48.5)
Parity				
No previous live birth	191	15,465	40.3	(35.1-45.8)
1	177	13,722	44.9	(39.1-50.9)
2+	168	13,306	44.0	(38.1-50.1)
Last Year's Household Income				
<\$16,000	103	6,897	39.7	(32.1-47.9)
\$16,001-\$24,000	73	4,665	38.7	(29.6-48.8)
\$24,001-\$40,000	79	6,443	49.9	(40.4-59.4)
\$40,001-\$60,000	63	5,717	44.1	(34.9-53.7)
\$60,001+	176	16,279	42.5	(37.3-47.9)

Table 80. Prevalence of infant usually sleeping in a sleep sack or wearable blanket by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	516	45,038	45.4	(42.1-48.8)
Maternal Age				
<20 Years	15	778	20.5**	(10.1-37.2)
20-29 Years	248	22,352	42.4	(37.8-47.2)
30+ Years	253	21,907	51.3	(46.4-56.3)
Race/Ethnicity				
White, non-Hispanic	333	34,277	51.7	(47.2-56.0)
Black, non-Hispanic	110	3,477	20.0	(16.7-23.8)
Hispanic	27	2,772	37.2	(25.3-51.0)
Asian/Pacific Islander, non-Hispanic	15	1,543	66.6**	(44.6-83.1)
Other, non-Hispanic	27	2,547	50.8	(35.1-66.4)
Education				
<High School	40	2,858	27.7	(18.9-38.8)
HS Grad/GED	96	8,010	33.4	(26.8-40.8)
Some College	149	12,732	44.9	(39.0-51.0)
College Degree+	225	20,990	58.4	(53.0-63.7)
Post Pregnancy Insurance Status				
Uninsured	22	1,639	34.2	(21.0-50.4)
Medicaid/Public	143	10,645	32.0	(26.7-37.8)
Private	337	31,795	55.1	(50.7-59.4)
Marital Status				
Married	351	32,427	53.8	(49.5-58.1)
Other	165	12,610	32.4	(27.4-37.8)
Parity				
No previous live birth	212	18,969	49.2	(43.7-54.6)
1	161	14,370	47.3	(41.4-53.4)
2+	143	11,698	38.7	(32.9-44.8)
Last Year's Household Income				
<\$16,000	71	4,331	25.0	(18.7-32.7)
\$16,001-\$24,000	51	4,243	36.2	(26.9-46.7)
\$24,001-\$40,000	51	4,982	37.9	(29.0-47.8)
\$40,001-\$60,000	64	5,835	45.0	(35.8-54.5)
\$60,001+	251	23,891	62.2	(57.0-67.2)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 81. Prevalence of infant usually sleeping with a blanket by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	450	32,145	32.5	(29.5-35.8)
Maternal Age				
<20 Years	24	1,099	28.8	(17.1-44.1)
20-29 Years	244	18,039	34.2	(29.8-38.8)
30+ Years	182	13,007	30.8	(26.4-35.5)
Race/Ethnicity				
White, non-Hispanic	160	18,021	27.2	(23.4-31.4)
Black, non-Hispanic	219	7,220	41.3	(36.9-45.8)
Hispanic	35	3,443	47.1	(33.9-60.7)
Asian/Pacific Islander, non-Hispanic	12	1,193	49.2	(29.4-69.2)
Other, non-Hispanic	23	2,114	43.9	(28.8-60.3)
Education				
<High School	71	4,374	42.4	(32.0-53.4)
HS Grad/GED	135	9,452	39.1	(32.3-46.3)
Some College	133	9,837	34.3	(28.8-40.3)
College Degree+	106	8,320	23.8	(19.4-28.7)
Post Pregnancy Insurance Status				
Uninsured	21	1,820	38.1	(24.0-54.5)
Medicaid/Public	197	11,251	33.7	(28.6-39.2)
Private	213	17,732	30.9	(27.0-35.2)
Marital Status				
Married	209	17,868	30.0	(26.2-34.1)
Other	241	14,277	36.3	(31.4-41.6)
Parity				
No previous live birth	154	11,418	29.6	(24.9-34.9)
1	146	9,654	32.0	(26.8-37.7)
2+	150	11,073	36.7	(31.0-42.9)
Last Year's Household Income				
<\$16,000	103	5,790	33.4	(26.4-41.3)
\$16,001-\$24,000	62	3,813	31.6	(23.3-41.4)
\$24,001-\$40,000	73	5,712	43.6	(34.3-53.3)
\$40,001-\$60,000	65	5,435	42.1	(33.1-51.7)
\$60,001+	96	8,763	23.3	(19.0-28.1)

**Table 82. Prevalence of infant usually sleeping with toys, cushions, or pillows
by maternal characteristics, MI PRAMS, 2019**

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	83	5,708	5.8	(4.4-7.6)
Maternal Age				
<20 Years	6	343	9.1**	(3.3-22.6)
20-29 Years	48	3,331	6.3	(4.4-9.1)
30+ Years	29	2,034	4.8	(3.1-7.3)
Race/Ethnicity				
White, non-Hispanic	26	2,494	3.8	(2.5-5.8)
Black, non-Hispanic	44	1,448	8.3	(6.1-11.2)
Hispanic	6	955	12.9**	(5.8-26.2)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	6	702	14.4**	(5.9-31.4)
Education				
<High School	12	756	7.4**	(3.5-14.9)
HS Grad/GED	26	1,726	7.2	(4.3-11.8)
Some College	23	1,458	5.1	(3.0-8.4)
College Degree+	21	1,713	4.9	(3.0-7.9)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	34	1,662	5.0	(3.2-7.7)
Private	40	3,151	5.5	(3.8-7.9)
Marital Status				
Married	35	2,912	4.9	(3.3-7.2)
Other	48	2,796	7.2	(4.9-10.3)
Parity				
No previous live birth	38	2,644	6.9	(4.7-10.2)
1	25	1,914	6.3	(4.0-9.9)
2+	20	1,150	3.8**	(2.1-6.9)
Last Year's Household Income				
<\$16,000	15	713	4.1**	(2.1-8.0)
\$16,001-\$24,000	9	544	4.6**	(1.8-11.4)
\$24,001-\$40,000	18	1,274	9.7**	(5.2-17.5)
\$40,001-\$60,000	11	732	5.6**	(2.6-11.7)
\$60,001+	21	1,944	5.1	(3.2-8.1)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 83. Prevalence of infant usually sleeping with crib bumper pads (mesh or non-mesh) by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	105	7,736	7.9	(6.3-9.8)
Maternal Age				
<20 Years	7	290	7.8**	(2.9-19.5)
20-29 Years	54	4,211	8.2	(6.0-11.1)
30+ Years	44	3,235	7.6	(5.5-10.5)
Race/Ethnicity				
White, non-Hispanic	39	4,254	6.5	(4.7-9.0)
Black, non-Hispanic	51	1,970	11.4	(8.7-14.8)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	7	637	13.1	(5.4-28.3)
Education				
<High School	11	1,176	11.5**	(5.9-21.4)
HS Grad/GED	26	1,338	5.7	(3.4-9.4)
Some College	32	2,243	8.0	(5.4-11.6)
College Degree+	33	2,836	8.0	(5.5-11.5)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	43	2,408	7.3	(4.9-10.7)
Private	58	4,907	8.6	(6.5-11.3)
Marital Status				
Married	51	4,841	8.1	(6.0-10.8)
Other	54	2,895	7.6	(5.5-10.5)
Parity				
No previous live birth	38	2,941	7.8	(5.4-11.2)
1	41	3,116	10.4	(7.3-14.5)
2+	26	1,680	5.6	(3.6-8.8)
Last Year's Household Income				
<\$16,000	16	820	4.8**	(2.6-8.8)
\$16,001-\$24,000	13	856	7.4**	(3.8-13.9)
\$24,001-\$40,000	15	1,182	9.3**	(5.0-16.8)
\$40,001-\$60,000	13	1,021	7.9**	(4.2-14.5)
\$60,001+	36	3,391	9.0	(6.4-12.5)

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 84. Prevalence of infant usually sleeping on his or her back[^] by maternal characteristics, MI PRAMS, 2019

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,081	85,912	84.9	(82.5-87.0)
Maternal Age				
<20 Years	40	2,632	69.3	(52.1-82.3)
20-29 Years	554	45,456	84.5	(81.0-87.4)
30+ Years	487	37,823	86.8	(83.2-89.7)
Race/Ethnicity				
White, non-Hispanic	557	59,302	88.3	(85.1-90.9)
Black, non-Hispanic	393	13,097	71.7	(67.5-75.6)
Hispanic	60	6,338	84.8**	(72.6-92.2)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	40	4,145	82.7**	(67.6-91.7)
Education				
<High School	110	7,882	75.1	(64.4-83.4)
HS Grad/GED	252	18,801	77.0	(70.8-82.2)
Some College	341	25,514	87.3	(83.3-90.4)
College Degree+	369	33,115	90.9	(87.5-93.5)
Post Pregnancy Insurance Status				
Uninsured	46	3,512	72.6	(56.4-84.5)
Medicaid/Public	414	27,461	81.2	(76.6-85.1)
Private	585	51,946	88.1	(85.2-90.6)
Marital Status				
Married	596	52,930	86.5	(83.3-89.2)
Other	485	32,981	82.4	(78.4-85.8)
Parity				
No previous live birth	403	33,961	85.5	(81.5-88.8)
1	337	26,842	86.6	(82.4-90.0)
2+	341	25,108	82.3	(77.4-86.4)
Last Year's Household Income				
<\$16,000	223	14,754	83.7	(78.0-88.1)
\$16,001-\$24,000	135	10,164	83.4	(75.6-89.1)
\$24,001-\$40,000	139	9,844	75.0	(65.6-82.5)
\$40,001-\$60,000	134	11,181	86.0	(78.0-91.4)
\$60,001+	380	35,810	91.4	(88.1-93.8)

[^]Sleeping on the back meant that respondent reported that they placed the baby to sleep on its back exclusively. Mothers reporting that their baby slept primarily on its stomach, side, or alternating between sleep positions are not included in this count.

*Data not shown due to small sample size and/or relative standard error > 50%.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 85. Prevalence of life stressors experienced by mothers in 12 months before delivery, MI PRAMS, 2019

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Life stressors (non-exclusive)				
I moved to a new address	456	33,750	32.5	(29.5-35.6)
A close family member was very sick and had to go to the hospital	332	24,129	23.3	(20.6-26.1)
Someone very close to me died	296	18,881	18.2	(15.9-20.7)
I argued with my husband or partner more than usual	283	17,884	17.3	(15.0-19.8)
I had problems paying the rent, mortgage, or other bills	245	16,686	16.1	(13.8-18.7)
My husband, partner, or I had a cut in work hours or pay	203	14,311	13.8	(11.7-16.3)
I had to live with a friend or family member	212	14,054	13.6	(11.4-16.0)
Someone very close to me had a problem with drinking or drugs	145	10,865	10.5	(8.5-12.8)
I lost my job even though I wanted to go on working	180	10,680	10.3	(8.5-12.4)
My husband or partner lost his job	144	9,291	9.0	(7.3-11.0)
My husband or partner said he did not want me to be pregnant	100	7,351	7.1	(5.5-9.1)
I got divorced or separated from my husband or partner	99	6,641	6.4	(5.0-8.2)
My husband, partner, or I went to jail	62	2,938	2.8	(2.1-3.9)
I was apart from my husband or partner because of deployment or extended work-related travel	41	2,848	2.7	(1.9-4.0)
I was homeless or had to sleep outside, in a car, or in a shelter	53	2,713	2.6	(1.8-3.7)

Table 86. Cumulative number of life stressors experienced by mothers in 12 months before delivery, MI PRAMS, 2019

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0	388	32,225	31.0	(28.1-34.1)
1	310	25,190	24.2	(21.5-27.1)
2	223	17,102	16.4	(14.1-19.1)
3	173	11,421	11.0	(9.2-13.1)
4	106	6,949	6.7	(5.2-8.5)
5	66	4,211	4.0	(2.9-5.6)
6	40	2,290	2.2	(1.4-3.3)
7	33	2,290	2.2	(1.4-3.5)
8+	39	2,322	3.2	(2.1-4.9)

Table 87. Prevalence of unmet basic needs during pregnancy, MI PRAMS, 2019

Unmet basic need	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Types (non-exclusive)				
House or apartment was too crowded	102	6,808	6.6	(5.1-8.5)
Skipped meals or ate less because there was not enough money for food	103	5,997	5.8	(4.5-7.6)
Could not keep basic utility services on (heat, water, light)	105	5,800	5.7	(4.4-7.2)
Did not have affordable, reliable transportation	104	5,758	5.6	(4.4-7.1)
Did not have safe housing	64	4,393	4.3	(3.1-5.8)
Did not have consistent housing	65	4,249	4.2	(3.0-5.7)
Could not access a telephone when needed	33	1,563	1.5	(1.0-2.4)
Other unmet needs	78	4,512	4.4	(3.3-6.0)

Table 88. Cumulative number of unmet basic needs during pregnancy, MI PRAMS, 2019

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
None	987	79,144	76.9	(74.0-79.5)
1	221	15,164	14.7	(12.5-17.2)
2	78	4,835	4.7	(3.5-6.3)
3	36	2,152	2.1	(1.3-3.3)
4+	36	1,655	1.6	(1.0-2.5)

Table 89. Prevalence of any physical violence 12 months before or during pregnancy, MI PRAMS, 2019

Time period of abuse	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Abuse either 12 months before conception or during pregnancy	86	5,214	5.0	(3.8-6.7)
Abuse 12 months before conception	73	4,553	4.4	(3.2-6.0)
Abuse during pregnancy	52	3,000	2.9	(2.0-4.2)

Table 90. Perpetrator of abuse 12 months before conception, MI PRAMS, 2019

Person who abused mother	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Husband/partner	30	1,812	1.8	(1.1-2.9)
Ex-husband/partner	28	1,833	1.8	(1.1-3.0)
Another family member	17	832	0.8**	(0.4-1.5)
Someone else	16	1,201	1.2**	(0.6-2.2)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 91. Perpetrator of abuse during pregnancy, MI PRAMS, 2019

Person who abused mother	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Husband/partner	24	1,243	1.2	(0.7-2.1)
Ex-husband/partner	15	690	0.7	(0.3-1.3)
Another family member	12	618	0.6**	(0.3-1.3)
Someone else	9	734	0.7**	(0.3-1.5)

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 92. Prevalence of maternal adverse childhood experiences, MI PRAMS, 2019

Adverse childhood experience	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Types (non-exclusive)				
A parent or guardian I lived with got divorced or separated	505	37,590	36.9	(33.7-40.2)
A parent or guardian I lived with had a serious drinking or drug problem	239	17,918	17.6	(15.2-20.4)
We had to move because of trouble paying the rent or mortgage	222	16,931	16.7	(14.3-19.4)
A parent or guardian got in trouble with the law or went to jail	201	15,574	15.3	(13.0-18.0)
Most of the time, I did not have an adult who believed in me and who I could count on to help me	141	9,912	9.7	(7.9-11.9)
Someone in my family or I went hungry because we could not afford enough food	126	9,546	9.4	(7.6-11.6)
I was in foster care (removed from home by court or child welfare)	76	5,607	5.5	(4.1-7.4)

Table 93. Cumulative number of maternal adverse childhood experiences, MI PRAMS, 2019

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
None	617	49,865	48.8	(45.5-52.1)
1	344	24,129	23.6	(20.9-26.5)
2	184	12,684	12.4	(10.4-14.7)
3	92	6,643	6.5	(5.0-8.4)
4+	109	8,925	8.7	(6.9-10.9)

Table 94. From childhood through age 13 how often did mother's family have difficulty paying for basic needs like food and housing, MI PRAMS, 2019

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Very often	68	5,272	5.2	(3.9-7.0)
Somewhat often	155	10,976	10.8	(8.9-13.1)
Not very often	340	25,934	25.6	(22.8-28.6)
Never	778	59,183	58.4	(55.1-61.6)

Notes on Maternal Resilience

This resilience scale was created and tested by Bruce Smith and colleagues ("The Brief Resilience Scale: Assessing the Ability to Bounce Back." *International Journal of Behavioral Medicine*, 2008). Half of the questions on PRAMS were asked in the affirmative - an answer of "YES" indicated that a mother typically had a positive response to a stressful life event. The other half of the questions were asked in the negative. For these questions, an answer of "NO" meant that a mother usually did not have a negative response to a stressful situation.

In order to calculate an individual's cumulative number of positive responses to stress and to provide a basic summary "resilience score," all survey questions in the table below have been converted to positive language. Women with a resilience score of 6 report that most of the time they handle stressful situations well. Women with a resilience score of 0 report that they typically respond poorly to stressful life situations.

**Table 95. Positive responses to stressful events,
MI PRAMS, 2019**

Stressful event response	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
I do not take a long time to get over set-backs in my life	1,219	93,625	91.0	(88.9-92.8)
It is not hard for me to snap back when something bad happens	1,181	90,450	87.9	(85.6-89.9)
I do not have a hard time making it through stressful events	1,153	88,815	86.5	(84.1-88.6)
I tend to bounce back quickly after hard times	979	73,811	71.9	(68.9-74.8)
It does not take me long to recover from a stressful event	730	58,139	56.8	(53.5-60.0)
I usually come through a difficult time with little trouble	749	57,022	55.5	(52.2-58.7)

**Table 96. Cumulative number of positive responses to stressful life events,
MI PRAMS, 2019**

Number of positive responses to stressful situations	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-3	266	19,363	18.8	(16.4-21.5)
4	379	28,688	27.9	(25.0-30.9)
5	301	19,390	18.8	(16.5-21.4)
6	412	35,539	34.5	(31.4-37.8)

**Table 97. Post-partum checkup for mother,
MI PRAMS, 2019**

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Yes	1,182	91,109	88.7	(86.5-90.5)
No	177	11,629	11.3	(9.5-13.5)

**Table 98. Prevalence of health care provider discussions and actions taken during postpartum checkup,
MI PRAMS, 2019**

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Discussion or action (non-exclusive)				
Ask if feeling down or depressed	1,070	82,970	90.9	(88.7-92.7)
Discuss birth control methods	1,037	80,442	88.1	(85.5-90.2)
Ask if taking other prescriptions medications	826	63,292	69.7	(66.4-72.8)
Ask about current emotional or physical abuse	818	60,827	66.8	(63.5-70.1)
Ask if smoking cigarettes	778	59,015	64.8	(61.4-68.0)
Discuss healthy eating, exercise and losing pregnancy weight gain	677	49,179	54.0	(50.4-57.5)
Discuss how long to wait to get pregnant again	650	48,786	53.7	(50.1-57.2)
Ask if drinking alcohol	652	47,489	52.5	(49.0-56.0)
Advise to take folic acid	569	44,664	49.7	(46.1-53.2)
Give or prescribe hormonal or barrier contraceptives	530	37,508	41.3	(37.9-44.8)
Ask if taking prescription opioids	414	28,354	31.4	(28.2-34.7)
Test for diabetes	273	16,244	18.3	(15.9-21.0)
Insert an IUD	205	15,211	16.8	(14.3-19.6)

Table 99. Post-partum depression symptoms,
MI PRAMS, 2019

Experience	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Since new baby was born, number of mothers reporting...				
<i>Feeling down, depressed, or hopeless</i>				
Never	487	35,074	34.4	(31.4-37.6)
Rarely	427	35,252	34.6	(31.5-37.8)
Sometimes	309	22,957	22.5	(19.9-25.4)
Often	100	7,045	6.9	(5.4-8.8)
Always	19	1,642	1.6**	(0.9-2.9)
<i>Having little or no pleasure in doing things</i>				
Never	534	41,662	40.5	(37.3-43.8)
Rarely	384	30,798	30.0	(27.0-33.1)
Sometimes	277	20,167	19.6	(17.1-22.3)
Often	108	6,659	6.5	(5.1-8.2)
Always	53	3,534	3.4	(2.4-4.9)
Mothers reporting significant post-partum depression[^]	217	15,090	14.8	(12.6-17.4)

[^]This measure is a composite of the previous two questions. If a mother reported either of these statements to be true for her on average often or always, she was coded as demonstrating significant post-partum depression.

**Relative standard error (RSE) exceeds 30%. Interpret with caution.

**Table 100. Maternal immunization before and during pregnancy,
MI PRAMS, 2019**

Maternal immunization	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Flu shot				
No	667	46,664	45.4	(42.2-48.7)
Yes, before pregnancy	154	11,346	11.0	(9.2-13.3)
Yes, during pregnancy	542	44,744	43.5	(40.3-46.8)
Tdap				
No	417	27,476	26.5	(23.8-29.4)
Yes	863	69,678	67.2	(64.2-70.2)
I don't know	95	6,476	6.2	(4.8-8.1)

**Table 101. Plans for future infant immunization,
MI PRAMS, 2019**

Immunization plans	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
As doctor recommends	1,041	83,891	84.0	(81.6-86.2)
All vaccines but on a different schedule	84	6,435	6.4	(5.0-8.2)
Only some vaccines	124	6,656	6.7	(5.3-8.3)
No vaccines planned	46	2,899	2.9	(2.0-4.1)

**Table 102. Average amount of maternal sleep each night in the last week,
MI PRAMS, 2019**

Quantity (hours)	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-3	74	3,476	3.5	(2.6-4.6)
4-6	811	59,778	59.8	(56.5-63.0)
7-8	389	34,684	34.7	(31.6-38.0)
9+	32	1,977	2.0	(1.2-3.2)

**Table 103. Average number of times mother awoke each night in the last week,
MI PRAMS, 2019**

Number of awakenings	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-1	255	22,800	24.1	(21.2-27.2)
2	421	32,381	34.2	(31.1-37.6)
3	324	23,508	24.9	(22.0-27.9)
4+	240	15,857	16.8	(14.4-19.4)

**Table 104. Partner living arrangement with mother,
MI PRAMS, 2019**

Living arrangement	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Types (exclusive)				
Partner lives with me all of the time	996	82,457	80.8	(78.3-83.1)
Partner lives with me some of the time	69	4,103	4.0	(2.9-5.5)
Partner does not live with me	129	6,984	6.8	(5.4-8.6)
I do not have a husband or partner	150	8,482	8.3	(6.7-10.2)

**Table 105. Ways that husband or partner supports mother,
MI PRAMS, 2019**

Support of mother	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Types (non-exclusive)				
My partner is someone who helps me care for my child(ren)	1,137	89,776	96.4	(94.9-97.4)
My partner is someone whom I can count on	1,115	88,752	95.5	(93.9-96.7)
My partner is someone I can talk with about things that are important to me	1,113	88,447	94.9	(93.2-96.2)
My partner is someone who is affectionate toward me	1,109	88,024	94.9	(93.2-96.2)
My partner is someone who talks with me and spends time with me	1,106	87,879	94.3	(92.4-95.7)
My partner is someone who does things with me	1,102	87,623	94.3	(92.5-95.7)
My partner is someone I can count on for financial support if I need it	1,076	85,661	92.1	(90.0-93.8)
My partner is someone who understands how I am feeling	1,047	83,068	89.3	(86.9-91.3)

**Table 106. Cumulative number of ways that husband or partner supports mother,
MI PRAMS, 2019**

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-2	52	2,893	3.1	(2.2-4.4)
3-5	51	3,889	4.2	(2.9-5.9)
6-7	121	9,157	9.8	(7.9-12.1)
8	968	77,405	82.9	(80.1-85.4)

**Table 107. People available to help watch baby,
MI PRAMS, 2019**

Infant caretakers	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Caretakers (non-exclusive)				
Husband/Partner	954	74,405	73.1	(70.0-75.9)
Baby's grandparent	863	66,080	64.8	(61.6-68.0)
Other close family member/relative	479	34,314	33.6	(30.6-36.9)
Babysitter, nanny, or other childcare provider	157	11,887	11.7	(9.8-13.9)
Friend or neighbor	119	9,370	9.2	(7.4-11.4)
Staff at day care center	111	8,784	8.6	(7.0-10.6)
Other	41	3,119	3.1	(2.1-4.5)
Baby always with mom	230	15,512	15.2	(13.0-17.7)

**Table 108. Cumulative number of infant caretakers,
MI PRAMS, 2019**

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
None	89	7,286	7.1	(5.5-9.2)
1	342	24,926	24.4	(21.7-27.4)
2	462	36,886	36.2	(33.0-39.4)
3	321	24,926	24.4	(21.7-27.4)
4+	115	7,955	7.8	(6.2-9.7)

APPENDIX

Comparison of MI PRAMS 2019 Data Tables to MI PRAMS 2015 Data Tables

MI PRAMS 2019 Table	MI PRAMS 2015 Table
Table 1. Distribution of selected maternal characteristics	Table 1. Distribution of selected maternal characteristics
Table 2. Distribution of pre-pregnancy maternal body mass index categories	Table 2. Distribution of pre-pregnancy maternal body mass index categories
Table 3. Prevalence of pre-pregnancy underweight BMI by maternal characteristics	Table 3. Prevalence of pre-pregnancy underweight BMI by maternal characteristics
Table 4. Prevalence of pre-pregnancy normal weight BMI by maternal characteristics	Table 4. Prevalence of pre-pregnancy normal weight BMI by maternal characteristics
Table 5. Prevalence of pre-pregnancy overweight BMI by maternal characteristics	Table 5. Prevalence of pre-pregnancy overweight BMI by maternal characteristics
Table 6. Prevalence of pre-pregnancy obese BMI by maternal characteristics	Table 6. Prevalence of pre-pregnancy obese BMI by maternal characteristics
Table 7. Prevalence of maternal health problems during the 3 months before pregnancy	Table 7. Prevalence of selected maternal health problems during the 3 months before pregnancy
Table 8.** Prevalence of health care visits in the year before pregnancy - including dental or mental health - with a doctor, nurse, or other healthcare worker by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 9**. Type of healthcare visits among women in the 12 months before pregnancy <i>**New topic on Phase 8 survey</i>	
Table 10**. Type of counseling/screening among women reporting any healthcare visits in the 12 months before pregnancy <i>**New topic on Phase 8 survey</i>	
Table 11.^ Frequency of taking a folate-containing vitamin in the month before pregnancy <i>^ Topic available but not reported in Phase 7 tables</i>	
Table 12.^ Prevalence of no folic acid containing vitamin consumption in the month before pregnancy by maternal characteristics <i>^ Topic available but not reported in Phase 7 tables</i>	
Table 13. Distribution of pregnancy intention categories	Table 11. Distribution of pregnancy intention categories
Table 14. Distribution of unintended pregnancy subtypes among women reporting either unsure or unintended pregnancy	Table 12. Distribution of unintended pregnancy subtypes among women reporting either unsure or unintended pregnancy
Table 15. Prevalence of unintended pregnancy by maternal characteristics	Table 13. Prevalence of unintended pregnancy by maternal characteristics

MI PRAMS 2019 Table	MI PRAMS 2015 Table
Table 16.^^ Distribution of contraceptive behaviors at the time of conception <i>^^ Topic available in Phase 6 Survey</i>	
Table 17. Characteristics of women trying to conceive during the pre-pregnancy period	Table 14. Characteristics of women trying to conceive during the pre-pregnancy periods
Table 18. Characteristics of women who became pregnant despite using contraceptive practices	Table 15. Prevalence of women who became pregnant despite using contraceptive practices
Table 19. ^^ Prevalence of contraception methods used by women who became pregnant despite using contraceptive practices <i>^^Topic available in Phase 6 Survey</i>	
Table 20. Prevalence of women who were not trying to conceive but were not doing anything to prevent pregnancy by maternal characteristics	Table 16. Prevalence of women who were not trying to conceive but were not doing anything to prevent pregnancy by maternal characteristics
Table 21. Reasons women who were not trying to conceive - but were not doing anything to prevent pregnancy - did not use contraception	Table 17. Reasons women who were not trying to conceive but were not doing anything to prevent pregnancy did not use contraception
Table 22. Prevalence of using any postpartum contraceptive method by maternal characteristics	Table 18. Prevalence of using any postpartum pregnancy prevention method by maternal characteristics
Table 23. Prevalence of postpartum contraceptive methods	Table 19. Prevalence of postpartum contraceptive methods
Table 24.^ Prevalence of no postpartum contraceptive methods by maternal characteristics <i>^ Topic available but not reported in Phase 7 tables</i>	
Table 25. Reasons for not using any postpartum contraception	Table 20. Reasons for not using postpartum contraceptive methods
Table 26. Trimester of entry into prenatal care	Table 21. Trimester of entry into prenatal care
Table 29. Prevalence of getting prenatal care as early as wanted	Table 22. Prevalence of getting prenatal care as early as wanted
Table 30. Prevalence of getting prenatal care as early as wanted by first trimester entry into prenatal care <i>^ Topic available but not reported in Phase 7 tables</i>	
Table 31.^^ Barriers to starting prenatal care as early as wanted among women who began prenatal care during the first trimester <i>^^Topic available in Phase 6 survey</i>	
Table 32.^^ Barriers to starting prenatal care as early as wanted among women who began prenatal care after the first trimester <i>^^Topic available in Phase 6 survey</i>	
Table 33**. Prevalence of topics discussed by health care provider during prenatal care visits <i>**New topic on Phase 8 survey</i>	

MI PRAMS 2019 Table	MI PRAMS 2015 Table
Table 34**. Prevalence of Pregnancy Complications <i>**New topic on Phase 8 survey</i>	
Table 35. Prevalence of smoking during the 3 months before pregnancy by maternal characteristics	
Table 36. Prevalence of smoking during the last 3 months of pregnancy by maternal characteristics	Table 30. Prevalence of smoking during the last three months of pregnancy by maternal characteristics
Table 37^. Prevalence of smoking after pregnancy by maternal characteristics <i>^ Topic available but not reported in Phase 7 tables</i>	
Table 38**. Prevalence of electronic cigarette usage during the 3 months before pregnancy by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 39**. Prevalence of electronic cigarette usage during the last 3 months of pregnancy <i>**New topic on Phase 8 survey</i>	
Table 40**. Prevalence of hookah usage in 2 years before survey completion by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 41**. Prevalence of marijuana or hash usage in 12 months before pregnancy by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 42**. Prevalence of marijuana or hash usage during pregnancy by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 43**. Prevalence of marijuana or hash usage after pregnancy by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 44**. Prevalence of opioid pain reliever usage in 12 months before pregnancy by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 45**. Prevalence of opioid pain reliever usage during pregnancy by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 46**. Prevalence of opioid pain reliever usage after pregnancy by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 47. Distribution of delivery methods	Table 31. Distribution of delivery methods
Table 48. Prevalence of low birthweight by maternal characteristics	Table 33. Prevalence of low birthweight by maternal characteristics

MI PRAMS 2019 Table	MI PRAMS 2015 Table
Table 49. Distribution of low birthweight subcategories among low birthweight infants	Table 34. Distribution of low birthweight subcategories among low birthweight infants
Table 50. Prevalence of low birthweight by smoking status during last three months of pregnancy	Table 35. Prevalence of low birthweight by smoking status during last three months of pregnancy
Table 51 [^] . Prevalence of high birthweight by maternal characteristics [^] <i>Topic available, but not reported in Phase 7 tables</i>	Table 36. Prevalence of high birthweight by maternal characteristics
Table 52 [^] . Prevalence of high birthweight by diabetes before pregnancy or gestational diabetes [^] <i>Topic available, but not reported in Phase 7 tables</i>	
Table 53. Distribution of infant birthweights and gestational ages	Table 39. Distribution of infant birthweights and gestational ages
Table 54. Prevalence of preterm birth by maternal characteristics	Table 38. Prevalence of preterm birth by maternal characteristics
Table 55 [^] . Breastfeeding duration categories [^] <i>Topic available, but not reported in Phase 7 tables</i>	
Table 56 ^{**} . Reasons for not initiating breastfeeding ^{**} <i>New topic on Phase 8 survey</i>	
Table 57 ^{**} . Cumulative number of reasons for not initiating breastfeeding ^{**} <i>New topic on Phase 8 survey</i>	
Table 58. Prevalence of breastfeeding initiation by maternal characteristics	Table 40. Prevalence of breastfeeding initiation by maternal characteristics
Table 59 [^] . Prevalence of 1-month breastfeeding duration by maternal characteristics [^] <i>Topic available, but not reported in Phase 7 tables</i>	
Table 60. [^] Prevalence of 2-month breastfeeding duration by maternal characteristics [^] <i>Topic available, but not reported in Phase 7 tables</i>	
Table 61 [^] . Prevalence of 3-month breastfeeding duration by maternal characteristics [^] <i>Topic available, but not reported in Phase 7 tables</i>	
Table 62 [*] . Reasons for stopping breastfeeding [*] <i>Direct comparison not possible between survey phases</i>	Table 43. Reasons for stopping breastfeeding
Table 63 ^{**} . Breastfeeding information sources before or after delivery ^{**} <i>New topic on Phase 8 survey</i>	
Table 64 ^{**} . Total number of breastfeeding information sources ^{**} <i>New topic on Phase 8 survey</i>	

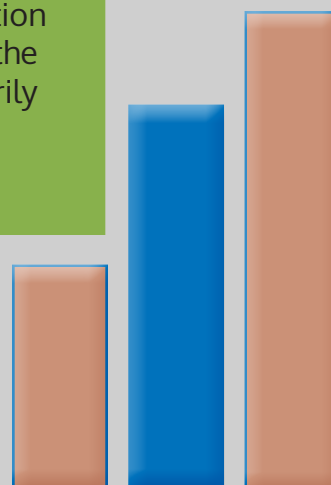
MI PRAMS 2019 Table	MI PRAMS 2015 Table
Table 65**. Did mother ever use a breast pump <i>**New topic on Phase 8 survey</i>	
Table 66**. Source of breast pump <i>**New topic on Phase 8 survey</i>	
Table 67**. Prevalence of ever using a breast pump by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 68**. Baby health indicators <i>**New topic on phase 8 survey</i>	
Table 69. Distribution of WIC status during pregnancy,	Table 44. Distribution of WIC status during pregnancy
Table 70**. How often infant slept alone in his/her own bed over last two weeks <i>**New topic on Phase 8 survey</i>	
Table 71**. Infant slept in his/her own crib or bed in mother's room <i>**New topic on Phase 8 survey</i>	
Table 72*. Infant sleep space characteristics <i>*Direct comparison not possible between survey phases</i> <i>^Topic available, but not reported in Phase 7 tables</i>	
Table 73. Primary infant sleep position	Table 45. Primary infant sleep position
Table 74*. Prevalence of infant always or often sleeping alone in his/her own crib or bed in the last two weeks by maternal characteristics <i>*Direct comparison not possible between survey phases</i>	Table 52. Prevalence of infant usually sleeping with mother or another person by maternal characteristics
Table 75**. Prevalence of infant sleeping alone in his/her own crib or bed in the same room as mother by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 76.* Prevalence of infant usually sleeping in a crib by maternal characteristics <i>*Direct comparison not possible between survey phases</i>	Table 48. Prevalence of infant usually sleeping on a crib by maternal characteristics
Table 77.* Prevalence of infant usually sleeping on an adult-sized mattress by maternal characteristics <i>*Direct comparison not possible between survey phases</i>	Table 49. Prevalence of infant usually sleeping on a firm mattress by maternal characteristics
Table 78**. Prevalence of infant usually sleeping on a couch, sofa, or armchair by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 79**. Prevalence of infant usually sleeping in an infant car seat or swing by maternal characteristics <i>**New topic on Phase 8 survey</i>	
Table 80**. Prevalence of infant usually sleeping in a sleep sack or wearable blanket by maternal characteristics <i>**New topic on Phase 8 survey</i>	

MI PRAMS 2019 Table	MI PRAMS 2015 Table
Table 81.* Prevalence of infant usually sleeping with a blanket by maternal characteristics <i>* Direct comparison not possible between survey phases</i>	Table 51. Prevalence of infant usually sleeping with blankets by maternal characteristics
Table 82*^. Prevalence of infant usually sleeping with toys, cushions, or pillows by maternal characteristics <i>* Direct comparison not possible between survey phases</i> <i>^ Topic available, but not reported in Phase 7 tables</i>	
Table 83.* Prevalence of infant usually sleeping with crib bumper pads (mesh or non-mesh) by maternal characteristics <i>* Direct comparison not possible between survey phases</i>	Table 50. Prevalence of infant sleeping with bumper pads by maternal characteristics
Table 84. Prevalence of infant usually sleeping on his or her back by maternal characteristics	Table 46. Prevalence of infant back sleeping position by maternal characteristics
Table 85. Prevalence of life stressors experienced by mothers in 12 months before delivery	Table 53. Prevalence of life stressors experienced by mothers
Table 86. Cumulative number of life stressors experienced by mothers in 12 months before delivery	Table 54. Number of life stressors experienced by mothers
Table 87** . Prevalence of unmet basic needs during pregnancy <i>** New topic on phase 8 survey</i>	
Table 88** . Cumulative number of unmet basic needs during pregnancy <i>** New topic on phase 8 survey</i>	
Table 89* . Prevalence of any physical violence 12 months before or during pregnancy <i>* Direct comparison not possible between survey phases</i>	Table 55. Prevalence of intimate partner violence by time period
Table 90. Perpetrator of abuse 12 months before conception	
Table 91. Perpetrator of abuse during pregnancy	
Table 92** . Prevalence of maternal adverse childhood experiences <i>** New topic on phase 8 survey</i>	
Table 93** . Cumulative number of maternal adverse childhood experiences <i>** New topic on phase 8 survey</i>	
Table 94** . From childhood through age 13 how often did mother's family have difficulty paying for basic needs like food and housing <i>** New topic on phase 8 survey</i>	
Table 95** . Positive responses to stressful events <i>** New topic on phase 8 survey</i>	

MI PRAMS 2019 Table	MI PRAMS 2015 Table
Table 96**. Cumulative number of positive responses to stressful life events <i>** New topic on phase 8 survey</i>	
Table 97. Post-partum checkup for mother	Table 60. Post-partum checkup for mother
Table 98**. Prevalence of health care provider discussions and actions taken during postpartum checkup <i>** New topic on phase 8 survey</i>	
Table 99. Post-partum depression symptoms	Table 61. Post-partum depression symptoms
Table 100^. Maternal immunization before and during pregnancy <i>^ Topic available, but not reported in Phase 7 tables (flu only)</i>	
Table 101**. Plans for future infant immunization <i>** New topic on survey Phase 8</i>	
Table 102**. Average amount of maternal sleep each night in the last week <i>** New topic on survey Phase 8</i>	
Table 103**. Average number of times mother awoke each night in the last week <i>** New topic on survey Phase 8</i>	
Table 104**. Partner living arrangement with mother <i>** New topic on survey Phase 8</i>	
Table 105**. Ways that husband or partner supports mother <i>** New topic on survey Phase 8</i>	
Table 106**. Cumulative number of ways that husband or partner supports mother <i>** New topic on survey Phase 8</i>	
Table 107**. People available to help watch baby <i>** New topic on survey Phase 8</i>	
Table 108**. Cumulative number of infant caretakers <i>** New topic on survey Phase 8</i>	

Phase 8 of the PRAMS survey includes birth years 2016, 2017, 2018, and 2019. Table numbers and names for the 2016, 2017, 2018, and 2019 Maternal and Infant Health Summary Reports are identical. PRAMS tables, including tables for the 2015 birth year, are available on the MI PRAMS Reports tab at Michigan.gov/PRAMS

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