MICHIGAN PRAMS
Pregnancy Risk Assessment Monitoring System

Telling
the story
of Michigan's
mothers
and
babies.

2018 Birth Year
Maternal and Infant Health Summary Tables

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The people of the State of Michigan and the mothers who completed the PRAMS survey

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The Division for Vital Records and Health Statistics and the Bloustein Center for Survey Research at Rutgers University provided data collection for the 2018 Michigan PRAMS.

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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 2018 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 2018, 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
Stratum 6: Healthy Start participants from two locations in Michigan

In 2018, 3,483 women were selected for MI PRAMS and 1,870 completed the survey, for an unweighted response rate of 53.7 percent. Adjusting for differing probabilities of selection within each stratum, the weighted response rate is 58.0 percent. Survey results from these 1,870 respondents are weighted to represent the approximately 106,645 pregnancies resulting in live births in 2018. 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 2018 birth year is the third 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: https://www.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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Maternal Age				
Total	1,870	106,645	100.0	
<18 Years	26	1,243	1.2	(0.7-1.9)
18-19 Years	71	3,254	3.1	(2.2-4.1)
20-24 Years	385	19,654	18.4	(16.3-20.8)
25-29 Years	598	33,951	31.8	(29.2-34.6)
30-34 Years	534	33,310	31.2	(28.6-34.0)
35-39 Years	207	12,747	12.0	(10.2-14.0)
40+ Years	49	2,485	2.3	(1.6-3.3)
Race/Ethnicity				
Total	1,865	106,223	100.0	
White, non-Hispanic	806	72,317	68.1	(65.9-70.2)
Black, non-Hispanic	878	19,443	18.3	(17.9-18.8)
Hispanic	73	6,624	6.2	(4.8-8.0)
Asian/Pacific Islander, non-Hispanic	41	2,900	2.7	(1.9-3.9)
Other, non-Hispanic	67	4,939	4.6	(3.5-6.1)
Education				
Total	1,846	105,297	100.0	
<High School	222	10,543	10.0	(8.4-11.9)
HS Grad/GED	531	27,649	26.3	(23.7-28.9)
Some College	584	31,018	29.5	(26.9-32.2)
College Degree+	509	36,088	34.3	(31.6-37.1)
Pre-Pregnancy Insurance Status				
Total	1,802	102,930	100.0	
Uninsured	102	7,313	7.1	(5.6-8.9)
Medicaid/Public	768	33,119	32.2	(29.6-34.9)
Private	932	62,499	60.7	(57.8-63.5)
Marital Status				
Total	1,869	106,485	100.0	
Married	879	63,006	59.2	(56.4-61.9)
Other	990	43,479	40.8	(38.1-43.6)
Parity				
Total	1,870	106,645	100.0	
No Prior Live Births	680	37,258	34.9	(32.3-37.7)
1	567	36,929	34.6	(31.9-37.5)
2+	623	32,458	30.4	(27.8-33.2)
Last Year's Household Income				
Total	1,644	96,016	100.0	
<$16,000	482	19,010	19.8	(17.6-22.2)
$16,001-$24,000	263	14,278	14.9	(12.8-17.2)
$24,001-$40,000	232	13,980	14.6	(12.5-17.0)
$40,001-$60,000	200	14,134	14.7	(12.6-17.1)
$60,001+	467	34,613	36.0	(33.2-39.0)

Table 2. Distribution of pre-pregnancy maternal body mass index categories, MI PRAMS, 2018

Body Mass Index (BMI)	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
BMI Category[ǂ]				
Underweight	50	2,731	2.6	(1.8-3.6)
Normal Weight	753	45,560	42.7	(39.9-45.6)
Overweight	452	27,082	25.4	(22.9-28.0)
Obese	615	31,273	29.3	(26.8-32.0)

ǂBased 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). *Weight gain during pregnancy: reexamining the guidelines*. National Academies Press.

Table 3. Prevalence of pre-pregnancy underweight BMI by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	50	2,731	2.6	(1.8-3.6)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	32	1,915	3.6	(2.3-5.4)
30+ Years	16	786	1.6	(0.9-3.0)
Race/Ethnicity				
White, non-Hispanic	22	1,828	2.5	(1.6-4.0)
Black, non-Hispanic	23	550	2.8	(1.8-4.3)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	7	407	3.9**	(1.4-9.9)
HS Grad/GED	25	1,181	4.3	(2.5-7.1)
Some College	8	563	1.8**	(0.8-4.1)
College Degree+	9	566	1.6**	(0.8-3.2)
Pre-Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	24	979	3.0	(1.7-5.1)
Private	19	1,206	1.9	(1.1-3.2)
Marital Status				
Married	17	1,176	1.9	(1.1-3.2)
Other	33	1,554	3.6	(2.3-5.6)
Parity				
No previous live birth	14	868	2.3**	(1.3-4.2)
1	15	896	2.4**	(1.3-4.6)
2+	21	966	3.0	(1.6-5.3)
Last Year's Household Income				
<$16,000	14	591	3.1**	(1.5-6.2)
$16,001-$24,000	7	544	3.8**	(1.6-8.8)
$24,001-$40,000	9	365	2.6**	(1.2-5.8)
$40,001-$60,000	5	478	3.4**	(1.3-8.7)
$60,001+	6	403	1.2**	(0.5-2.8)

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

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

Table 4. Prevalence of pre-pregnancy normal weight BMI by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	753	45,560	42.7	(39.9-45.6)
Maternal Age				
<20 Years	49	2,490	55.4	(42.2-67.8)
20-29 Years	383	21,420	40.0	(36.0-44.0)
30+ Years	321	21,649	44.6	(40.4-48.9)
Race/Ethnicity				
White, non-Hispanic	372	32,251	44.6	(40.9-48.4)
Black, non-Hispanic	301	6,611	34.0	(30.7-37.4)
Hispanic	24	2,194	33.1	(22.1-46.4)
Asian/Pacific Islander, non-Hispanic	24	1,774	61.2	(43.2-76.5)
Other, non-Hispanic	29	2,512	50.9	(36.7-64.9)
Education				
<High School	90	5,106	48.4	(39.4-57.5)
HS Grad/GED	189	9,697	35.1	(29.8-40.8)
Some College	210	11,047	35.6	(30.7-40.9)
College Degree+	258	19,246	53.3	(48.3-58.3)
Pre-Pregnancy Insurance Status				
Uninsured	46	2,845	38.9	(28.0-51.1)
Medicaid/Public	272	11,579	35.0	(30.3-39.9)
Private	403	29,367	47.0	(43.2-50.8)
Marital Status				
Married	382	29,080	46.2	(42.3-50.0)
Other	371	16,480	37.9	(33.8-42.2)
Parity				
No previous live birth	301	16,464	44.2	(39.6-48.8)
1	233	16,382	44.4	(39.3-49.6)
2+	219	12,714	39.2	(34.1-44.5)
Last Year's Household Income				
<$16,000	177	6,461	34.0	(28.2-40.2)
$16,001-$24,000	90	5,412	37.9	(30.4-46.0)
$24,001-$40,000	81	5,108	36.5	(28.9-44.9)
$40,001-$60,000	70	5,308	37.6	(29.9-45.9)
$60,001+	232	18,009	52.0	(46.9-57.1)

Table 5. Prevalence of pre-pregnancy overweight BMI by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	452	27,082	25.4	(22.9-28.0)
Maternal Age				
<20 Years	21	1,034	23.0	(13.6-36.1)
20-29 Years	244	13,973	26.1	(22.6-29.9)
30+ Years	187	12,075	24.9	(21.3-28.8)
Race/Ethnicity				
White, non-Hispanic	201	18,811	26.0	(22.8-29.5)
Black, non-Hispanic	198	4,258	21.9	(19.1-24.9)
Hispanic	19	1,593	24.0	(14.8-36.5)
Asian/Pacific Islander, non-Hispanic	14	850	29.3	(16.0-47.5)
Other, non-Hispanic	18	1,367	27.7	(16.9-41.8)
Education				
<High School	55	2,592	24.6	(17.7-33.0)
HS Grad/GED	105	6,046	21.9	(17.3-27.2)
Some College	160	8,874	28.6	(24.0-33.8)
College Degree+	123	8,949	24.8	(20.7-29.4)
Pre-Pregnancy Insurance Status				
Uninsured	25	1,843	25.2	(16.2-37.0)
Medicaid/Public	181	8,959	27.1	(22.7-31.9)
Private	230	15,109	24.2	(21.1-27.6)
Marital Status				
Married	218	16,567	26.3	(23.0-29.9)
Other	233	10,355	23.8	(20.3-27.8)
Parity				
No previous live birth	149	8,992	24.1	(20.3-28.4)
1	142	9,471	25.6	(21.4-30.4)
2+	161	8,619	26.6	(22.1-31.5)
Last Year's Household Income				
<$16,000	89	3,831	20.2	(15.3-26.0)
$16,001-$24,000	78	4,342	30.4	(23.5-38.4)
$24,001-$40,000	61	3,745	26.8	(20.0-34.9)
$40,001-$60,000	52	3,574	25.3	(18.7-33.2)
$60,001+	112	8,385	24.2	(20.1-28.9)

Table 6. Prevalence of pre-pregnancy obese BMI by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	615	31,273	29.3	(26.8-32.0)
Maternal Age				
<20 Years	25	943	21.0	(12.6-32.9)
20-29 Years	324	16,297	30.4	(26.7-34.3)
30+ Years	266	14,032	28.9	(25.2-32.9)
Race/Ethnicity				
White, non-Hispanic	211	19,427	26.9	(23.6-30.4)
Black, non-Hispanic	356	8,024	41.3	(37.8-44.8)
Hispanic	29	2,818	42.5	(30.3-55.8)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	18	916	18.6**	(9.8-32.2)
Education				
<High School	70	2,438	23.1	(16.7-31.0)
HS Grad/GED	212	10,724	38.8	(33.3-44.6)
Some College	206	10,533	34.0	(29.0-39.2)
College Degree+	119	7,326	20.3	(16.6-24.6)
Pre-Pregnancy Insurance Status				
Uninsured	27	2,196	30.0	(20.1-42.3)
Medicaid/Public	291	11,601	35.0	(30.4-40.0)
Private	280	16,816	26.9	(23.7-30.4)
Marital Status				
Married	262	16,183	25.7	(22.5-29.2)
Other	353	15,090	34.7	(30.7-39.0)
Parity				
No previous live birth	216	10,934	29.3	(25.3-33.7)
1	177	10,180	27.6	(23.2-32.4)
2+	222	10,158	31.3	(26.6-36.4)
Last Year's Household Income				
<$16,000	202	8,127	42.8	(36.5-49.3)
$16,001-$24,000	88	3,981	27.9	(21.4-35.4)
$24,001-$40,000	81	4,763	34.1	(26.6-42.5)
$40,001-$60,000	73	4,774	33.8	(26.3-42.1)
$60,001+	117	7,815	22.6	(18.6-27.1)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 7. Prevalence of maternal health problems during the 3 months before pregnancy, MI PRAMS, 2018

Maternal Health Problem	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Types (non-exclusive)				
Anxiety	429	26,914	25.4	(22.9-28.1)
Depression	296	16,436	15.6	(13.5-17.9)
Anemia	366	14,574	13.8	(12.1-15.8)
Asthma	270	13,542	12.8	(11.0-14.9)
Thyroid Problems	110	8,666	8.2	(6.6-10.1)
Polycystic Ovary Syndrome (PCOS)	102	6,234	5.9	(4.7-7.5)
Hypertension	143	5,907	5.6	(4.5-7.0)
Diabetes	69	4,442	4.2	(3.2-5.6)
Heart Problems	63	4,196	4.0	(2.9-5.3)
Epilepsy	55	3,706	3.5	(2.6-4.8)

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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,172	72,473	68.7	1,172
Maternal Age				
<20 Years	40	1,934	43.5	(31.0-56.9)
20-29 Years	541	32,674	61.6	(57.5-65.5)
30+ Years	591	37,865	78.9	(75.1-82.2)
Race/Ethnicity				
White, non-Hispanic	609	53,967	74.9	(71.4-78.1)
Black, non-Hispanic	453	10,077	53.0	(49.4-56.5)
Hispanic	42	3,660	55.5	(42.3-67.9)
Asian/Pacific Islander, non-Hispanic	27	1,836	65.9	(47.4-80.6)
Other, non-Hispanic	40	2,817	60.4	(45.2-73.9)
Education				
<High School	92	4,891	48.0	(38.9-57.2)
HS Grad/GED	266	14,891	54.5	(48.6-60.2)
Some College	375	20,820	67.7	(62.5-72.5)
College Degree+	425	30,916	86.2	(82.4-89.3)
Pre-Pregnancy Insurance Status				
Uninsured	36	2,755	39.5	(28.1-52.2)
Medicaid/Public	402	18,927	57.7	(52.6-62.6)
Private	693	48,520	78.0	(74.6-81.0)
Marital Status				
Married	668	48,452	77.4	(73.9-80.5)
Other	504	24,021	56.2	(51.8-60.4)
Parity				
No previous live birth	443	25,742	69.8	(65.4-73.9)
1	361	25,166	69.1	(64.1-73.7)
2+	368	21,565	66.9	(61.8-71.6)
Last Year's Household Income				
<$16,000	241	9,735	52.1	(45.6-58.6)
$16,001-$24,000	143	8,320	59.2	(51.0-66.9)
$24,001-$40,000	138	9,311	66.9	(58.9-74.1)
$40,001-$60,000	147	10,502	75.1	(67.0-81.7)
$60,001+	404	30,029	86.8	(83.0-89.9)

Table 9. Type of healthcare visits among women in the 12 months before pregnancy, MI PRAMS, 2018

Type of visit	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Type of Visit (non-exclusive)				
Dentist	722	45,280	61.9	(58.3-65.3)
Family doctor check up	711	39,741	54.4	(50.8-57.9)
OB/GYN check up	675	39,745	54.3	(50.8-57.8)
Family planning/Birth control	206	11,892	16.2	(13.8-19.0)
Illness	159	11,202	15.3	(12.9-18.2)
Depression/Anxiety	158	8,683	11.9	(9.8-14.4)
Injury	71	4,154	5.7	(4.3-7.5)
Other	129	8,390	11.5	(9.4-14.0)

Table 10. Type of counseling/screening among women reporting any healthcare visits in the 12 months before pregnancy, MI PRAMS, 2018

Type of counseling/screening	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Type (non-exclusive)				
Smoking screening	938	56,352	77.9	(74.7-80.7)
Current job duties	783	46,551	64.5	(61.0-67.9)
Depression screening	702	40,256	55.8	(52.2-59.3)
Emotional and physical abuse screening	672	38,243	53.1	(49.5-56.6)
Birth control	492	26,873	37.5	(34.1-41.0)
Family planning	459	27,691	38.5	(35.1-42.0)
Healthy weight	467	25,562	35.6	(32.2-39.0)
Folic acid vitamins	380	24,018	33.4	(30.1-36.8)
HIV test administered	438	18,304	25.8	(23.0-28.8)
Improving pre-conception health	344	19,603	27.2	(24.2-30.5)
STI	361	17,361	24.1	(21.3-27.2)
Controlling medical conditions e.g. diabetes/high blood pressure	174	7,776	10.8	(8.9-13.1)

Table 11. Frequency of taking a folate-containing vitamin in the month before pregnancy, MI PRAMS, 2018

Frequency of vitamin use	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Frequency of vitamin use				
Didn't take a vitamin	1,015	54,015	51.0	(48.1-53.9)
1-3 times per week	130	7,135	6.7	(5.4-8.3)
4-6 times per week	104	6,876	6.5	(5.2-8.1)
Every day of the week	602	37,937	35.8	(33.1-38.6)

Table 12. Prevalence of no folic acid containing vitamin consumption in the month before pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,015	54,015	51.0	(48.1-53.9)
Maternal Age				
<20 Years	63	3,261	73.1	(60.4-82.9)
20-29 Years	618	32,521	60.9	(56.8-64.9)
30+ Years	334	18,233	37.9	(33.8-42.2)
Race/Ethnicity				
White, non-Hispanic	355	34,201	47.4	(43.6-51.3)
Black, non-Hispanic	570	12,496	65.1	(61.6-68.4)
Hispanic	38	3,415	52.7	(39.6-65.4)
Asian/Pacific Islander, non-Hispanic	14	1,252	43.2	(26.8-61.2)
Other, non-Hispanic	35	2,420	49.3	(35.2-63.4)
Education				
<High School	145	6,805	66.2	(56.8-74.5)
HS Grad/GED	348	18,064	65.6	(60.0-70.9)
Some College	349	17,900	57.9	(52.5-63.1)
College Degree+	157	10,277	28.6	(24.3-33.3)
Pre-Pregnancy Insurance Status				
Uninsured	75	5,421	74.1	(62.6-83.1)
Medicaid/Public	507	21,622	66.0	(61.0-70.7)
Private	400	25,538	41.0	(37.3-44.9)
Marital Status				
Married	349	24,348	38.9	(35.1-42.8)
Other	666	29,667	68.7	(64.5-72.6)
Parity				
No previous live birth	353	18,239	49.2	(44.5-53.9)
1	293	18,133	49.4	(44.3-54.6)
2+	369	17,643	54.8	(49.4-60.0)
Last Year's Household Income				
<$16,000	332	13,820	73.4	(67.4-78.6)
$16,001-$24,000	179	9,684	68.2	(60.2-75.2)
$24,001-$40,000	138	7,475	53.7	(45.3-62.0)
$40,001-$60,000	99	6,823	48.3	(40.0-56.7)
$60,001+	134	10,369	30.0	(25.4-34.9)

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, 2018**

Intention	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Intended	909	59,915	57.2	(54.4-60.1)
Unintended	549	26,853	25.7	(23.2-28.3)
Unsure	377	17,905	17.1	(15.0-19.4)

**Table 14. Distribution of unintended pregnancy subtypes among women reporting either unsure
or unintended pregnancy, MI PRAMS, 2018**

Unintended Pregnancy Subtype	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Mistimed	403	20,283	45.3	(41.0-49.7)
Unwanted	146	6,571	14.7	(11.8-18.1)
Unsure	377	17,905	40.0	(35.8-44.4)

Table 15. Prevalence of unintended pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	549	26,853	25.7	(23.2-28.3)
Maternal Age				
<20 Years	44	2,038	45.9	(33.2-59.2)
20-29 Years	344	16,204	30.8	(27.1-34.7)
30+ Years	161	8,611	18.1	(15.0-21.7)
Race/Ethnicity				
White, non-Hispanic	161	15,593	22.0	(18.9-25.4)
Black, non-Hispanic	347	7,723	40.5	(37.1-44.0)
Hispanic	21	2,118	32.6	(21.6-46.0)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	15	998	20.2	(10.9-34.3)
Education				
<High School	81	3,777	37.0	(28.5-46.4)
HS Grad/GED	190	9,104	33.8	(28.6-39.5)
Some College	182	7,968	26.0	(21.6-31.0)
College Degree+	84	5,363	15.1	(11.8-19.0)
Pre-Pregnancy Insurance Status				
Uninsured	40	2,825	40.8	(29.3-53.3)
Medicaid/Public	287	11,767	35.8	(31.1-40.8)
Private	214	12,137	19.7	(16.9-22.8)
Marital Status				
Married	153	10,568	17.1	(14.3-20.3)
Other	396	16,286	38.0	(33.9-42.3)
Parity				
No previous live birth	189	8,868	24.4	(20.7-28.6)
1	158	8,286	22.8	(18.9-27.4)
2+	202	9,700	30.2	(25.5-35.3)
Last Year's Household Income				
<$16,000	204	7,931	42.4	(36.1-48.9)
$16,001-$24,000	95	4,126	29.3	(22.7-36.9)
$24,001-$40,000	77	4,666	33.7	(26.2-42.2)
$40,001-$60,000	45	2,764	20.1	(14.2-27.6)
$60,001+	58	3,934	11.5	(8.7-15.2)

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

Table 16. Distribution of contraceptive behaviors at the time of conception, MI PRAMS, 2018

Contraceptive Practice Subtype	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Trying to conceive	837	54,944	52.7	(49.8-55.6)
Avoiding pregnancy	338	17,125	16.4	(14.4-18.7)
Neither trying nor avoiding pregnancy	649	32,197	30.9	(28.3-33.6)

Table 17. Prevalence of trying to conceive during the pre-pregnancy period by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	837	54,944	52.7	(49.8-55.6)
Maternal Age				
<20 Years	15	503	11.6**	(6.0-21.4)
20-29 Years	377	24,573	46.7	(42.6-50.9)
30+ Years	445	29,869	63.1	(58.8-67.1)
Race/Ethnicity				
White, non-Hispanic	476	40,485	56.9	(53.0-60.7)
Black, non-Hispanic	251	5,670	30.0	(26.8-33.4)
Hispanic	38	3,492	54.6	(41.4-67.2)
Asian/Pacific Islander, non-Hispanic	33	2,376	84.0**	(64.3-93.9)
Other, non-Hispanic	38	2,806	61.0	(45.8-74.3)
Education				
<High School	53	2,909	28.1	(20.4-37.4)
HS Grad/GED	167	9,757	36.3	(30.8-42.2)
Some College	244	15,103	49.5	(44.1-55.0)
College Degree+	365	26,794	75.8	(71.3-79.9)
Pre-Pregnancy Insurance Status				
Uninsured	32	2,352	33.2	(22.6-45.7)
Medicaid/Public	226	10,761	33.1	(28.4-38.1)
Private	550	40,045	65.1	(61.4-68.7)
Marital Status				
Married	591	42,699	69.5	(65.7-73.1)
Other	246	12,246	28.7	(24.8-33.0)
Parity				
No previous live birth	333	19,511	53.5	(48.8-58.1)
1	280	22,334	62.0	(56.8-66.8)
2+	224	13,099	41.3	(36.1-46.7)
Last Year's Household Income				
<$16,000	108	4,019	21.7	(16.9-27.5)
$16,001-$24,000	81	5,060	36.3	(28.7-44.6)
$24,001-$40,000	95	6,686	48.5	(40.2-57.0)
$40,001-$60,000	109	7,809	57.6	(49.0-65.8)
$60,001+	365	27,279	80.0	(75.6-83.8)

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

Table 18. Prevalence of becoming pregnant despite using contraceptive practices by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	338	17,125	16.4	(14.4-18.7)
Maternal Age				
<20 Years	22	740	17.1	(9.7-28.5)
20-29 Years	190	9,220	17.5	(14.6-20.9)
30+ Years	126	7,165	15.1	(12.2-18.6)
Race/Ethnicity				
White, non-Hispanic	102	10,431	14.7	(12.1-17.7)
Black, non-Hispanic	209	4,551	24.1	(21.2-27.2)
Hispanic	15	1,371	21.4	(12.6-34.1)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	8	522	11.3**	(4.8-24.6)
Education				
<High School	54	2,005	19.4	(13.4-27.1)
HS Grad/GED	110	6,255	23.3	(18.6-28.8)
Some College	122	5,748	18.9	(15.0-23.4)
College Degree+	45	2,812	8.0	(5.6-11.2)
Pre-Pregnancy Insurance Status				
Uninsured	26	1,964	27.7	(18.1-40.0)
Medicaid/Public	171	7,321	22.5	(18.5-27.1)
Private	132	7,573	12.3	(10.0-15.1)
Marital Status				
Married	99	7,181	11.7	(9.3-14.6)
Other	239	9,944	23.3	(19.8-27.2)
Parity				
No previous live birth	97	4,795	13.1	(10.3-16.6)
1	94	4,751	13.2	(10.1-17.0)
2+	147	7,579	23.9	(19.6-28.8)
Last Year's Household Income				
<$16,000	112	4,481	24.2	(19.0-30.4)
$16,001-$24,000	57	3,129	22.4	(16.4-29.9)
$24,001-$40,000	52	2,693	19.5	(13.7-27.0)
$40,001-$60,000	30	2,028	15.0	(9.8-22.1)
$60,001+	33	2,367	6.9	(4.7-10.1)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 19. Prevalence of contraception methods used by women who became pregnant despite using contraceptive practices, MI PRAMS, 2018

Method	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Reason (non-exclusive)				
Withdrawal	127	6,943	36.7	(30.3-43.6)
Condoms	137	6,441	34.0	(27.9-40.7)
Oral Contraceptives	96	4,917	26.0	(20.3-32.5)
Rhythm Method	26	2,097	11.1	(7.2-16.6)
Shot Every 3 Months	26	607	3.2	(1.9-5.3)
Intrauterine Device	14	515	2.7**	(1.4-5.2)
Contraceptive Patch	12	281	1.5**	(0.8-2.7)
Contraceptive Implant	7	181	1.0**	(0.4-2.1)
Other	11	447	2.4**	(1.1-5.1)

**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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	649	32,197	30.9	(28.3-33.6)
Maternal Age				
<20 Years	56	3,075	71.2	(58.7-81.1)
20-29 Years	392	18,784	35.7	(31.9-39.8)
30+ Years	201	10,338	21.8	(18.5-25.6)
Race/Ethnicity				
White, non-Hispanic	212	20,205	28.4	(25.0-32.1)
Black, non-Hispanic	394	8,681	45.9	(42.4-49.5)
Hispanic	18	1,529	23.9	(14.6-36.7)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	18	1,274	27.7	(16.3-43.0)
Education				
<High School	110	5,431	52.5	(43.3-61.5)
HS Grad/GED	240	10,864	40.4	(34.9-46.2)
Some College	204	9,638	31.6	(26.8-36.8)
College Degree+	88	5,728	16.2	(12.9-20.2)
Pre-Pregnancy Insurance Status				
Uninsured	41	2,773	39.1	(28.0-51.5)
Medicaid/Public	352	14,448	44.4	(39.4-49.5)
Private	234	13,875	22.6	(19.6-25.9)
Marital Status				
Married	165	11,557	18.8	(15.9-22.1)
Other	483	20,479	48.0	(43.6-52.4)
Parity				
No previous live births	235	12,184	33.4	(29.1-38.0)
1	177	8,966	24.9	(20.7-29.5)
2+	237	11,046	34.8	(29.9-40.1)
Last Year's Household Income				
<$16,000	249	10,002	54.1	(47.5-60.5)
$16,001-$24,000	115	5,760	41.3	(33.6-49.5)
$24,001-$40,000	80	4,397	31.9	(24.7-40.2)
$40,001-$60,000	54	3,713	27.4	(20.5-35.6)
$60,001+	62	4,439	13.0	(9.9-16.9)

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

Table 21. Reasons women who were not trying to conceive - but were not doing anything to prevent pregnancy - did not use contraception, MI PRAMS, 2018

Reason	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Reason (non-exclusive)				
Didn't Mind Getting Pregnant	299	16,346	48.4	(43.4-53.5)
Thought Couldn't Get Pregnant at That Time	198	7,852	23.3	(19.5-27.5)
Partner Didn't Want to Use Birth Control	121	5,286	15.7	(12.5-19.5)
Side Effects from Birth Control	94	4,084	12.1	(9.2-15.8)
Forgot to Use Birth Control	67	2,925	8.7	(6.3-11.8)
Thought Self/Partner Sterile	42	1,821	5.4	(3.5-8.2)
Problems Getting Birth Control	27	1,933	5.7	(3.6-9.0)
Other Reason	78	3,918	11.6	(8.7-15.3)

Table 22. Prevalence of using any postpartum contraceptive method by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,407	82,176	78.7	(76.2-81.0)
Maternal Age				
<20 Years	70	3,226	73.4	(59.7-83.7)
20-29 Years	735	41,978	80.2	(76.8-83.3)
30+ Years	602	36,972	77.5	(73.6-80.9)
Race/Ethnicity				
White, non-Hispanic	633	57,539	80.5	(77.3-83.3)
Black, non-Hispanic	640	14,067	75.3	(72.0-78.3)
Hispanic	61	5,366	82.1**	(69.0-90.4)
Asian/Pacific Islander, non-Hispanic	24	1,582	65.0	(44.5-81.2)
Other, non-Hispanic	45	3,273	67.5	(52.5-79.6)
Education				
<High School	163	7,374	71.8	(62.4-79.6)
HS Grad/GED	387	20,802	77.2	(72.1-81.7)
Some College	449	24,650	80.7	(76.1-84.5)
College Degree+	391	28,473	80.6	(76.3-84.2)
Pre-Pregnancy Insurance Status				
Uninsured	81	6,126	86.6**	(76.3-92.8)
Medicaid/Public	568	24,725	76.1	(71.5-80.2)
Private	714	48,860	79.5	(76.2-82.4)
Marital Status				
Married	680	49,308	79.8	(76.5-82.8)
Other	726	32,708	77.0	(73.1-80.4)
Parity				
No previous live birth	508	27,915	76.6	(72.5-80.3)
1	428	29,393	81.4	(77.0-85.2)
2+	471	24,868	77.9	(73.1-82.0)
Last Year's Household Income				
<$16,000	357	13,835	73.5	(67.2-78.9)
$16,001-$24,000	199	11,158	79.4	(72.4-85.0)
$24,001-$40,000	179	11,382	81.7	(74.7-87.1)
$40,001-$60,000	163	11,361	81.5	(74.1-87.1)
$60,001+	373	28,154	82.3	(78.1-85.9)

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

Table 23. Prevalence of postpartum contraceptive methods, MI PRAMS, 2018

Method	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Pregnancy prevention method (non-exclusive)				
Condoms	396	23,046	27.7	(24.9-30.8)
Oral Contraceptives	328	19,745	23.8	(21.1-26.7)
Withdrawal	216	13,786	16.6	(14.3-19.2)
Intrauterine Device	168	10,912	13.1	(11.0-15.6)
Tubal Ligation	177	9,461	11.4	(9.4-13.7)
Abstinence	155	6,926	8.3	(6.8-10.2)
Shot Every 3 Months	158	5,611	6.8	(5.4-8.4)
Rhythm Method	56	4,030	4.9	(3.6-6.5)
Partner Had Vasectomy	46	3,857	4.6	(3.3-6.4)
Contraceptive Implant	69	3,805	4.6	(3.3-6.2)
Contraceptive Patch or Vaginal Ring	33	1,376	1.7	(1.0-2.7)
Other Method	29	2,195	2.6	(1.7-4.1)

Table 24. Prevalence of no postpartum contraceptive methods by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	409	22,274	21.3	(19.0-23.8)
Maternal Age				
<20 Years	22	1,167	26.6	(16.3-40.3)
20-29 Years	216	10,351	19.8	(16.7-23.2)
30+ Years	171	10,755	22.5	(19.1-26.4)
Race/Ethnicity				
White, non-Hispanic	164	13,975	19.5	(16.7-22.7)
Black, non-Hispanic	202	4,622	24.7	(21.7-28.0)
Hispanic	9	1,173	17.9**	(9.6-31.0)
Asian/Pacific Islander, non-Hispanic	12	852	35.0	(18.8-55.5)
Other, non-Hispanic	21	1,578	32.5	(20.4-47.5)
Education				
<High School	49	2,897	28.2	(20.4-37.6)
HS Grad/GED	125	6,129	22.8	(18.3-27.9)
Some College	121	5,907	19.3	(15.5-23.9)
College Degree+	107	6,871	19.4	(15.8-23.7)
Pre-Pregnancy Insurance Status				
Uninsured	18	947	13.4**	(7.2-23.7)
Medicaid/Public	174	7,759	23.9	(19.8-28.5)
Private	198	12,625	20.5	(17.6-23.8)
Marital Status				
Married	182	12,479	20.2	(17.2-23.5)
Other	227	9,795	23.0	(19.6-26.9)
Parity				
No previous live birth	157	8,513	23.4	(19.7-27.5)
1	121	6,696	18.6	(14.8-23.0)
2+	131	7,065	22.1	(18.0-26.9)
Last Year's Household Income				
<$16,000	118	4,996	26.5	(21.1-32.8)
$16,001-$24,000	61	2,891	20.6	(15.0-27.6)
$24,001-$40,000	51	2,548	18.3	(12.9-25.3)
$40,001-$60,000	35	2,585	18.5	(12.9-25.9)
$60,001+	89	6,037	17.7	(14.1-21.9)

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

Table 25. Reasons for not using any postpartum contraception, MI PRAMS, 2018

Reason	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Reason (non-exclusive)				
Doesn't Want to Use Birth Control	145	7,966	34.4	(28.9-40.4)
Side Effects from Birth Control	133	6,380	27.6	(22.5-33.3)
Not Having Sex	117	5,588	24.4	(19.6-30.0)
Wants to Get Pregnant	58	3,616	15.7	(11.6-20.8)
Partner Doesn't Want to Use Anything	46	2,725	11.9	(8.4-16.6)
Problems Getting Birth Control	13	971	4.2**	(2.2-7.9)
Mother Had Tubes Tied	13	690	3.0**	(1.5-5.8)
Pregnant now	15	580	2.5**	(1.2-5.1)
Other Reason	58	3,053	13.2	(9.5-18.1)

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

Table 26. Trimester of entry into prenatal care,
MI PRAMS, 2018

Trimester of entry	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
1st Trimester	1,516	89,478	86.6	(84.6-88.5)
2nd Trimester	241	11,407	11.0	(9.4-13.0)
3rd Trimester	33	1,513	1.5	(0.9-2.3)
No prenatal care	19	873	0.8**	(0.5-1.5)

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

Table 27. Source of payments for prenatal care,
MI PRAMS, 2018

Source of prenatal care payment	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Source of payment (non-exclusive)				
Uninsured during pregnancy	10	622	0.6**	(0.3-1.3)
Private - from work	710	48,999	47.6	(44.7-50.5)
Medicaid	959	45,753	44.5	(41.6-47.4)
Private - from parent	107	6,780	6.6	(5.3-8.2)
Private - from MI Health Insurance Marketplace	67	3,947	3.8	(2.8-5.2)
Private - TRICARE/other military	11	822	0.8**	(0.4-1.6)
Other government	12	569	0.6**	(0.2-1.3)
Indian Health Services or other tribal	*	*	*	*
Other	91	4,090	4.0	(3.1-5.2)

*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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,516	89,478	86.6	(84.6-88.5)
Maternal Age				
<20 Years	62	2,810	67.1	(53.3-78.4)
20-29 Years	782	44,696	86.2	(83.2-88.7)
30+ Years	672	41,972	88.9	(85.8-91.4)
Race/Ethnicity				
White, non-Hispanic	715	63,690	90.5	(88.0-92.6)
Black, non-Hispanic	656	14,528	77.7	(74.6-80.6)
Hispanic	55	4,756	72.4	(59.0-82.7)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	53	3,760	81.4**	(66.4-90.6)
Education				
<High School	149	7,116	72.9	(63.9-80.3)
HS Grad/GED	405	21,520	80.1	(75.2-84.2)
Some College	472	26,555	88.5	(84.8-91.5)
College Degree+	470	33,199	94.0	(90.9-96.0)
Pre-Pregnancy Insurance Status				
Uninsured	75	5,336	80.1	(68.2-88.3)
Medicaid/Public	565	25,581	79.5	(75.3-83.1)
Private	826	55,914	91.5	(89.1-93.4)
Marital Status				
Married	775	55,859	91.3	(88.8-93.4)
Other	740	33,460	79.7	(76.0-83.0)
Parity				
No previous live birth	568	31,738	88.8	(85.5-91.4)
1	477	32,112	89.7	(86.2-92.4)
2+	471	25,628	80.8	(76.3-84.6)
Last Year's Household Income				
<$16,000	345	14,158	77.9	(72.1-82.7)
$16,001-$24,000	203	11,453	82.7	(76.1-87.8)
$24,001-$40,000	188	11,152	81.0	(73.5-86.8)
$40,001-$60,000	176	12,480	89.8	(83.3-93.9)
$60,001+	18	1,191	3.5	(2.0-6.0)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 29. Prevalence of getting prenatal care as early as wanted, MI PRAMS, 2018

Got care as early as wanted	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
No	276	13,510	13.0	(11.1-15.0)
Yes	1,545	90,718	87.0	(85.0-88.9)

Table 30. Prevalence of getting prenatal care as early as wanted by first trimester entry into prenatal care, MI PRAMS, 2018

Trimester of Entry to Prenatal Care	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
First Trimester				
Yes, started PNC as early as wanted	1,373	82,128	92.4	(90.6-93.9)
No, wanted to start PNC earlier	132	6,766	7.6	(6.1-9.4)
After First Trimester				
Yes, started PNC as early as wanted	135	6,664	52.4	(44.2-60.5)
No, wanted to start PNC earlier	134	6,050	47.6	(39.5-55.8)

Table 31. Barriers to starting prenatal care as early as wanted among women who began prenatal care during the first trimester, MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Barrier (non-exclusive)				
Could not get appt	53	2,510	40.9	(30.0-52.8)
Doctor/health plan would not start	38	2,406	38.7	(27.9-50.8)
Did not know pregnant	35	1,609	25.6	(17.0-36.8)
Not enough money to pay	11	555	8.9**	(4.4-17.2)
No time off from work or school	10	511	8.3**	(3.6-18.2)
Too many other things	14	384	6.4	(3.7-10.9)
Wanted to keep pregnancy secret	9	212	3.5**	(1.8-7.0)
No transportation	6	163	2.7**	(1.1-6.2)
No Medicaid card	*	*	*	*
Did not want prenatal care	*	*	*	*
No childcare	*	*	*	*

*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, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Barrier (non-exclusive)				
Did not know pregnant	77	3,3f39	50.4	(39.6-61.2)
Could not get appt	50	2,442	40.8	(30.1-52.5)
Not enough money or insurance to pay	24	1,590	26.7	(17.3-38.8)
Too many other things	31	1,431	23.9	(15.3-35.3)
No Medicaid card	16	1,024	17.6	(10.0-29.1)
No transportation	29	1,021	17.5	(10.7-27.2)
Wanted to keep pregnancy secret	24	970	16.8	(9.8-27.1)
No time off from work or school	15	829	14.3**	(7.6-25.4)
Doctor/health plan would not start	17	737	12.8**	(6.8-22.7)
Could not get childcare	12	365	6.3**	(2.5-14.9)
Did not want prenatal care	*	*	*	*

**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, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Topic (non-exclusive)				
Smoking During Pregnancy	1,753	100,444	96.4	(95.1-97.3)
Using Prescription Medicine During Pregnancy	1,733	100,078	96.2	(95.0-97.1)
Using Alcohol During Pregnancy	1,740	99,624	95.6	(94.2-96.7)
Breastfeeding Plans	1,695	97,217	93.6	(92.1-94.8)
Using Illegal Drug During Pregnancy	1,590	88,871	85.4	(83.2-87.4)
Post-partum contraception plans	1,545	87,575	84.3	(82.1-86.3)
Feeling depressed	1,543	86,638	83.4	(81.1-85.5)
Experiencing emotional of physical abuse	1,492	82,661	79.4	(76.9-81.7)
Offered HIV testing	1,324	72,730	71.2	(68.4-73.8)
Knowledge of appropriate weight gain	1,029	60,010	58.0	(55.0-60.9)

Table 34. Prevalence of Pregnancy Complications, MI PRAMS, 2018

Pregnancy Complications	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Severe nausea, vomiting, dehydration	398	17,660	16.7	(14.7-18.9)
Depression	320	16,403	15.6	(13.6-17.9)
High Blood Pressure	295	14,263	13.5	(11.7-15.6)
Kidney/Bladder Infection	257	13,624	12.9	(11.1-15.0)
Gestational Diabetes w/o Pre-Pregnancy Diabetes	153	8,993	8.6	(7.1-10.4)

Table 35. Prevalence of smoking during the 3 months before pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	403	23,257	22.0	(19.6-24.6)
Maternal Age				
<20 Years	20	1,407	31.4	(20.0-45.5)
20-29 Years	239	14,245	26.8	(23.2-30.8)
30+ Years	144	7,605	15.8	(12.9-19.3)
Race/Ethnicity				
White, non-Hispanic	189	17,598	24.5	(21.3-28.1)
Black, non-Hispanic	186	3,806	19.9	(17.3-22.8)
Hispanic	12	950	14.4	(7.6-25.7)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	15	743	15.0**	(7.3-28.6)
Education				
<High School	87	4,594	44.3	(35.4-53.6)
HS Grad/GED	154	9,056	33.1	(27.7-38.9)
Some College	129	7,163	23.3	(18.9-28.2)
College Degree+	28	2,157	6.0	(4.0-9.0)
Pre-Pregnancy Insurance Status				
Uninsured	30	2,502	33.0	(22.0-46.1)
Medicaid/Public	239	11,002	33.5	(28.8-38.6)
Private	37	3,451	47.9	(36.1-60.1)
Marital Status				
Married	100	6,771	10.8	(8.6-13.6)
Other	303	16,486	38.4	(34.1-42.9)
Parity				
No previous live birth	128	8,407	22.9	(19.0-27.3)
1	120	7,316	19.9	(16.0-24.5)
2+	155	7,534	23.4	(19.1-28.3)
Last Year's Household Income				
<$16,000	165	7,327	38.7	(32.5-45.3)
$16,001-$24,000	78	5,452	38.2	(30.6-46.5)
$24,001-$40,000	48	3,589	25.7	(18.9-34.0)
$40,001-$60,000	40	2,879	20.4	(14.3-28.1)
$60,001+	30	2,298	6.7	(4.5-9.8)

*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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	214	10,985	10.4	(8.7-12.4)
Maternal Age				
<20 Years	9	693	15.4**	(7.6-28.9)
20-29 Years	127	6,700	12.6	(10.0-15.7)
30+ Years	78	3,592	7.5	(5.5-10.1)
Race/Ethnicity				
White, non-Hispanic	98	8,123	11.3	(9.1-14.1)
Black, non-Hispanic	105	2,003	10.5	(8.6-12.7)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	8	627	12.7**	(5.4-26.9)
Education				
<High School	58	2,890	27.8	(20.2-36.9)
HS Grad/GED	89	4,818	17.6	(13.5-22.6)
Some College	60	2,836	9.2	(6.5-12.9)
College Degree+	*	*	*	*
Pregnancy Insurance Status				
Medicaid/Public	158	7,686	19.6	(16.0-23.8)
Private	40	2,398	4.1	(2.8-6.0)
Marital Status				
Married	47	2,806	4.5	(3.1-6.4)
Other	167	8,179	19.1	(15.7-22.9)
Parity				
No previous live birth	53	3,296	9.0	(6.5-12.3)
1	63	3,448	9.4	(6.7-13.0)
2+	98	4,241	13.2	(10.0-17.2)
Last Year's Household Income				
<$16,000	101	4,494	23.8	(18.5-30.0)
$16,001-$24,000	36	2,408	16.9	(11.5-24.2)
$24,001-$40,000	27	1,712	12.3	(7.6-19.2)
$40,001-$60,000	21	1,163	8.2	(4.7-14.0)
$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 37. Prevalence of smoking after pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	290	15,351	14.5	(12.5-16.8)
Maternal Age				
<20 Years	14	734	16.4**	(8.7-28.6)
20-29 Years	172	9,557	18.0	(14.9-21.5)
30+ Years	104	5,060	10.5	(8.2-13.5)
Race/Ethnicity				
White, non-Hispanic	125	11,136	15.5	(12.9-18.6)
Black, non-Hispanic	148	3,009	15.7	(13.4-18.4)
Hispanic	7	636	9.7**	(4.2-20.5)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	10	569	11.5**	(4.8-25.1)
Education				
<High School	73	3,605	34.7	(26.4-43.9)
HS Grad/GED	116	6,157	22.5	(17.9-27.8)
Some College	88	4,570	14.9	(11.3-19.2)
College Degree+	10	918	2.6**	(1.3-5.0)
Post Pregnancy Insurance Status				
Uninsured	12	568	15.5**	(7.0-31.0)
Medicaid/Public	215	10,553	26.4	(22.3-30.8)
Private	54	3,637	6.2	(4.6-8.5)
Marital Status				
Married	60	3,481	5.6	(4.0-7.6)
Other	230	11,871	27.7	(23.7-31.9)
Parity				
No previous live birth	76	4,529	12.4	(9.5-16.0)
1	97	5,803	15.8	(12.3-20.1)
2+	117	5,019	15.6	(12.1-19.8)
Last Year's Household Income				
<$16,000	130	5,597	29.5	(23.8-36.0)
$16,001-$24,000	58	3,586	25.1	(18.6-33.0)
$24,001-$40,000	34	2,312	16.6	(11.1-24.0)
$40,001-$60,000	29	2,004	14.2	(9.2-21.3)
$60,001+	10	780	2.3**	(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 38. Prevalence of electronic cigarette usage during the 3 months before pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	60	3,584	3.4	(2.5-4.6)
Maternal Age				
<20 Years	9	419	9.3**	(4.1-19.9)
20-29 Years	34	2,125	4.0	(2.7-6.0)
30+ Years	17	1,040	2.2	(1.2-3.9)
Race/Ethnicity				
White, non-Hispanic	38	2,950	4.1	(2.9-5.9)
Black, non-Hispanic	17	421	2.2	(1.3-3.6)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	13	707	6.8**	(3.5-12.9)
HS Grad/GED	24	1,501	5.5	(3.3-8.8)
Some College	20	1,203	3.9	(2.3-6.6)
College Degree+	*	*	*	*
Pre-Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	30	1,349	4.1	(2.6-6.5)
Private	25	1,743	2.8	(1.8-4.4)
Marital Status				
Married	17	1,071	1.7**	(1.0-3.1)
Other	43	2,513	5.9	(4.1-8.4)
Parity				
No previous live birth	31	2,071	5.7	(3.8-8.5)
1	13	910	2.5**	(1.3-4.8)
2+	16	602	1.9**	(1.0-3.6)
Last Year's Household Income				
<$16,000	21	829	4.4	(2.4-7.8)
$16,001-$24,000	14	1,099	7.7	(4.3-13.4)
$24,001-$40,000	9	558	4.0**	(1.7-8.9)
$40,001-$60,000	6	435	3.1**	(1.2-7.4)
$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, 2018

E-cigarette Usage	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
No	1,815	104,196	99.0	(98.4-99.4)
Yes	23	1,012	1.0	(0.6-1.6)

**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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	132	5,470	5.2	(4.2-6.5)
Maternal Age				
<20 Years	12	714	15.9**	(8.3-28.3)
20-29 Years	91	3,792	7.2	(5.5-9.4)
30+ Years	29	964	2.0	(1.3-3.3)
Race/Ethnicity				
White, non-Hispanic	31	2,694	3.8	(2.6-5.6)
Black, non-Hispanic	92	2,314	12.2	(9.9-14.8)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	20	883	8.6	(4.9-14.6)
HS Grad/GED	46	2,031	7.5	(5.2-10.8)
Some College	48	1,929	6.3	(4.3-9.2)
College Degree+	16	566	1.6**	(0.8-3.0)
Pre-Pregnancy Insurance Status				
Uninsured	19	1,318	18.5	(10.9-29.7)
Medicaid/Public	60	2,109	6.6	(4.8-9.0)
Private	48	1,765	2.9	(2.0-4.1)
Marital Status				
Married	31	1,740	2.8	(1.8-4.4)
Other	101	3,730	8.8	(6.8-11.3)
Parity				
No previous live birth	63	2,907	8.0	(5.9-10.8)
1	36	1,379	3.8	(2.4-5.9)
2+	33	1,184	3.7	(2.3-5.9)
Last Year's Household Income				
<$16,000	41	1,331	7.1	(4.8-10.3)
$16,001-$24,000	28	1,404	10.1	(6.3-15.9)
$24,001-$40,000	30	1,117	8.1	(5.0-12.8)
$40,001-$60,000	11	428	3.1**	(1.4-6.4)
$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 41. Prevalence of marijuana or hash usage in 12 months before pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	342	17,694	17.0	(14.9-19.3)
Maternal Age				
<20 Years	27	1,298	29.3	(18.7-42.7)
20-29 Years	217	11,150	21.4	(18.2-25.1)
30+ Years	98	5,246	11.0	(8.6-14.1)
Race/Ethnicity				
White, non-Hispanic	128	11,849	16.6	(13.9-19.8)
Black, non-Hispanic	194	4,082	22.2	(19.4-25.3)
Hispanic	10	1,028	15.6**	(8.2-27.9)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	10	735	15.6**	(7.5-29.7)
Education				
<High School	64	2,699	26.3	(19.1-35.1)
HS Grad/GED	128	5,970	22.3	(17.9-27.4)
Some College	113	6,271	20.8	(16.6-25.7)
College Degree+	34	2,532	7.1	(4.9-10.3)
Pre-Pregnancy Insurance Status				
Uninsured	24	2,104	29.4	(19.3-42.0)
Medicaid/Public	202	7,870	24.6	(20.5-29.2)
Private	106	7,376	12.0	(9.7-14.8)
Marital Status				
Married	71	4,928	8.0	(6.1-10.4)
Other	271	12,765	30.4	(26.4-34.7)
Parity				
No previous live birth	145	7,789	21.5	(17.8-25.7)
1	96	5,539	15.3	(11.9-19.4)
2+	101	4,366	13.8	(10.5-18.0)
Last Year's Household Income				
<$16,000	142	5,235	27.9	(22.5-34.1)
$16,001-$24,000	61	3,277	23.2	(17.1-30.6)
$24,001-$40,000	48	2,931	21.3	(15.2-29.0)
$40,001-$60,000	32	2,263	16.0	(10.7-23.3)
$60,001+	26	2,253	6.6	(4.3-9.9)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 42. Prevalence of marijuana or hash usage during pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	121	6,316	6.1	(4.8-7.7)
Maternal Age				
<20 Years	8	475	10.7**	(4.6-22.9)
20-29 Years	83	4,042	7.8	(5.8-10.3)
30+ Years	30	1,799	3.8	(2.4-6.0)
Race/Ethnicity				
White, non-Hispanic	47	4,170	5.9	(4.2-8.0)
Black, non-Hispanic	65	1,306	7.1	(5.5-9.2)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	7	608	12.6**	(5.6-26.0)
Education				
<High School	23	966	9.4	(5.2-16.4)
HS Grad/GED	48	2,008	7.5	(5.1-10.9)
Some College	40	2,406	8.0	(5.3-11.8)
College Degree+	9	777	2.2**	(1.0-4.5)
Pregnancy Insurance Status				
Medicaid/Public	86	4,042	10.5	(7.8-13.9)
Private	26	1,967	3.4	(2.2-5.3)
Marital Status				
Married	19	1,370	2.2	(1.3-3.8)
Other	102	4,946	11.7	(9.1-15.1)
Parity				
No previous live birth	40	2,129	5.9	(4.0-8.6)
1	35	2,134	5.9	(3.9-8.9)
2+	46	2,053	6.5	(4.2-9.9)
Last Year's Household Income				
<$16,000	66	2,579	13.7	(9.7-19.0)
$16,001-$24,000	16	971	6.9**	(3.7-12.4)
$24,001-$40,000	13	927	6.7**	(3.5-12.5)
$40,001-$60,000	10	839	6.0**	(2.9-11.9)
$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 43. Prevalence of marijuana or hash usage after pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	140	7,819	7.5	(6.1-9.3)
Maternal Age				
<20 Years	16	639	14.3**	(7.5-25.8)
20-29 Years	90	5,071	9.8	(7.5-12.7)
30+ Years	34	2,109	4.4	(2.9-6.7)
Race/Ethnicity				
White, non-Hispanic	59	5,625	7.9	(6.0-10.3)
Black, non-Hispanic	73	1,513	8.2	(6.5-10.4)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	7	565	12.4**	(5.2-26.9)
Education				
<High School	25	995	9.8	(5.6-16.9)
HS Grad/GED	55	2,540	9.5	(6.6-13.4)
Some College	45	3,015	10.0	(7.0-14.1)
College Degree+	14	1,110	3.1	(1.7-5.5)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	86	3,856	9.9	(7.4-13.1)
Private	40	3,008	5.2	(3.7-7.4)
Marital Status				
Married	23	1,987	3.2	(2.0-5.0)
Other	117	5,832	13.9	(11.0-17.4)
Parity				
No previous live birth	57	3,134	8.6	(6.3-11.8)
1	44	2,812	7.8	(5.3-11.1)
2+	39	1,872	6.0	(3.8-9.3)
Last Year's Household Income				
<$16,000	65	2,304	12.3	(8.6-17.2)
$16,001-$24,000	24	1,394	9.9	(5.9-16.0)
$24,001-$40,000	19	1,411	10.3	(6.1-16.8)
$40,001-$60,000	13	1,096	7.8**	(4.2-14.0)
$60,001+	10	1,087	3.2**	(1.7-6.0)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 44. Prevalence of opioid pain reliever usage in 12 months before pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	84	4,536	4.4	(3.3-5.7)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	43	2,404	4.6	(3.1-6.8)
30+ Years	40	2,095	4.4	(3.0-6.5)
Race/Ethnicity				
White, non-Hispanic	32	2,746	3.9	(2.6-5.7)
Black, non-Hispanic	45	1,051	5.7	(4.2-7.7)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	17	885	8.9**	(4.7-16.1)
HS Grad/GED	25	1,451	5.4	(3.2-9.0)
Some College	35	1,694	5.6	(3.6-8.4)
College Degree+	7	506	1.4**	(0.6-3.3)
Pre-Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	48	2,207	6.9	(4.7-10.1)
Private	31	2,053	3.3	(2.2-5.1)
Marital Status				
Married	21	1,717	2.8	(1.7-4.5)
Other	63	2,820	6.7	(4.8-9.3)
Parity				
No previous live birth	27	1,465	4.0	(2.5-6.4)
1	21	1,228	3.4	(1.9-5.8)
2+	36	1,843	5.8	(3.7-9.0)
Last Year's Household Income				
<$16,000	31	1,254	6.7	(4.0-10.8)
$16,001-$24,000	19	1,119	7.9	(4.5-13.6)
$24,001-$40,000	8	429	3.1**	(1.2-7.6)
$40,001-$60,000	9	428	3.0**	(1.3-7.1)
$60,001+	12	1,029	3.0**	(1.6-5.5)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 45. Prevalence of opioid pain reliever usage during pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	67	3,266	3.1	(2.3-4.3)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	29	1,425	2.7	(1.6-4.6)
30+ Years	35	1,754	3.7	(2.4-5.6)
Race/Ethnicity				
White, non-Hispanic	23	2,081	2.9	(1.8-4.6)
Black, non-Hispanic	37	821	4.5	(3.2-6.3)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	*	*	*	*
HS Grad/GED	20	984	3.7**	(2.0-6.6)
Some College	25	1,033	3.4	(1.9-5.9)
College Degree+	11	725	2.0**	(1.0-4.0)
Pregnancy Insurance Status				
Medicaid/Public	40	1,997	5.2	(3.4-7.9)
Private	24	1,213	2.1	(1.3-3.4)
Marital Status				
Married	19	1,203	1.9	(1.1-3.3)
Other	48	2,063	4.9	(3.3-7.3)
Parity				
No previous live birth	25	1,138	3.1	(1.9-5.2)
1	16	833	2.3**	(1.2-4.4)
2+	26	1,296	4.1	(2.4-7.0)
Last Year's Household Income				
<$16,000	21	839	4.5**	(2.3-8.6)
$16,001-$24,000	19	865	6.1**	(3.3-11.0)
$24,001-$40,000	*	*	*	*
$40,001-$60,000	*	*	*	*
$60,001+	11	834	2.4**	(1.3-4.7)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 46. Prevalence of opioid pain reliever usage after pregnancy by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	312	18,017	17.3	(15.2-19.7)
Maternal Age				
<20 Years	10	526	11.8**	(5.5-23.6)
20-29 Years	140	8,366	16.0	(13.1-19.4)
30+ Years	162	9,125	19.3	(16.1-22.9)
Race/Ethnicity				
White, non-Hispanic	166	13,572	19.1	(16.2-22.3)
Black, non-Hispanic	117	2,612	14.2	(11.9-17.0)
Hispanic	8	646	10.0**	(4.3-21.5)
Asian/Pacific Islander, non-Hispanic	10	661	24.1**	(11.9-42.9)
Other, non-Hispanic	9	410	8.3	(3.7-17.9)
Education				
<High School	29	1,622	16.3	(10.3-24.8)
HS Grad/GED	62	3,885	14.4	(10.6-19.4)
Some College	110	5,707	18.7	(14.9-23.4)
College Degree+	108	6,716	18.9	(15.3-23.1)
Post Pregnancy Insurance Status				
Uninsured	17	1,095	30.5	(17.2-48.0)
Medicaid/Public	134	6,846	17.5	(14.1-21.6)
Private	152	9,457	16.4	(13.7-19.5)
Marital Status				
Married	157	9,857	15.9	(13.3-19.0)
Other	155	8,160	19.4	(15.9-23.3)
Parity				
No previous live birth	117	6,499	17.9	(14.5-21.8)
1	100	6,833	18.8	(15.0-23.3)
2+	95	4,685	14.9	(11.5-19.1)
Last Year's Household Income				
<$16,000	72	3,636	19.4	(14.5-25.5)
$16,001-$24,000	47	2,487	17.6	(12.3-24.4)
$24,001-$40,000	35	2,001	14.3	(9.3-21.5)
$40,001-$60,000	43	2,719	19.2	(13.5-26.7)
$60,001+	96	6,082	17.7	(14.2-21.9)

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

Table 47. Distribution of delivery methods, MI PRAMS, 2018

Method	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Vaginal	1,147	67,588	63.4	(60.5-66.1)
First C-section	418	21,689	20.3	(18.2-22.7)
Repeat C-Section	260	14,555	13.6	(11.7-15.9)
Forceps delivery	15	1,077	1.0**	(0.6-1.8)
Vacuum delivery	33	2,567	2.4	(1.6-3.6)

*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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	338	8,071	7.6	(7.4-7.7)
Maternal Age				
<20 Years	13	362	8.0	(4.6-13.7)
20-29 Years	153	3,845	7.2	(6.3-8.1)
30+ Years	172	3,864	8.0	(7.1-8.9)
Race/Ethnicity				
White, non-Hispanic	186	4,328	6.0	(5.4-6.6)
Black, non-Hispanic	97	2,457	12.6	(10.9-14.7)
Hispanic	18	425	6.4	(3.9-10.4)
Asian/Pacific Islander, non-Hispanic	13	261	9.0**	(4.9-15.9)
Other, non-Hispanic	23	573	11.6	(7.3-17.8)
Education				
<High School	47	1,255	11.9	(8.9-15.8)
HS Grad/GED	91	2,493	9.0	(7.5-10.9)
Some College	97	2,192	7.1	(5.9-8.5)
College Degree+	101	2,076	5.8	(4.8-6.8)
Pregnancy Insurance Status				
Medicaid/Public	131	3,418	8.6	(7.4-10.0)
Private	175	3,873	6.5	(5.9-7.3)
Marital Status				
Married	177	3,711	5.9	(5.3-6.5)
Other	161	4,360	10.0	(8.9-11.3)
Parity				
No previous live birth	140	3,295	8.8	(7.7-10.2)
1	97	2,288	6.2	(5.2-7.4)
2+	101	2,488	7.7	(6.4-9.1)
Last Year's Household Income				
<$16,000	79	2,043	10.7	(8.7-13.2)
$16,001-$24,000	41	1,128	7.9	(5.8-10.6)
$24,001-$40,000	49	1,210	8.7	(6.5-11.4)
$40,001-$60,000	43	1,003	7.1	(5.2-9.5)
$60,001+	91	1,824	5.3	(4.4-6.3)

^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, 2018

Low Birthweight Subcategory	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total Prevalence	338	8,071	100.0	338
Very low birthweight	55	1,369	17.0	(13.3-21.4)
Moderately low birthweight	283	6,702	83.0	(78.6-86.7)

^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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	335	8,031	7.6	(7.4-7.8)
Smoking status				
Did not smoke in last 3 months of pregnancy	274	6,457	6.8	(6.5-7.2)
Smoked last 3 months of pregnancy	61	1,574	14.3	(11.0-18.5)

^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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	123	9,807	9.2	(7.6-11.1)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	53	4,036	7.5	(5.5-10.2)
30+ Years	65	5,452	11.2	(8.6-14.5)
Race/Ethnicity				
White, non-Hispanic	68	7,466	10.3	(8.2-12.9)
Black, non-Hispanic	42	916	4.7	(3.4-6.4)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	10	578	5.5**	(2.5-11.8)
HS Grad/GED	26	2,060	7.5	(4.7-11.5)
Some College	44	3,589	11.6	(8.3-15.8)
College Degree+	43	3,579	9.9	(7.2-13.4)
Pregnancy Insurance Status				
Medicaid/Public	40	2,192	5.5	(3.6-8.4)
Private	69	6,463	10.9	(8.6-13.8)
Marital Status				
Married	74	6,897	10.9	(8.7-13.8)
Other	49	2,910	6.7	(4.7-9.5)
Parity				
No previous live birth	46	3,671	9.9	(7.3-13.2)
1	40	3,823	10.4	(7.5-14.2)
2+	37	2,312	7.1	(4.7-10.6)
Last Year's Household Income				
<$16,000	19	916	4.8**	(2.6-8.9)
$16,001-$24,000	16	1,259	8.8	(5.0-15.1)
$24,001-$40,000	19	1,435	10.3	(6.0-17.0)
$40,001-$60,000	18	1,777	12.6	(7.8-19.6)
$60,001+	39	3,644	10.5	(7.7-14.3)

^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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	121	9,603	9.2	(7.5-11.2)
Diabetes status				
No diabetes before or during pregnancy	101	7,900	8.7	(7.0-10.7)
Diabetes before pregnancy	7	532	12.1**	(5.0-26.1)
Gestational diabetes	13	1,172	13.0	(7.3-22.1)

^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 53. Distribution of infant birthweights and gestational ages^, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Infant both low birthweight and preterm	229	5,389	5.1	(4.7-5.5)
Infant low birthweight and term	109	2,683	2.5	(2.2-2.9)
Infant not low birthweight, yes preterm	53	3,235	3.0	(2.1-4.3)
Infant not low birthweight, yes term	1,479	95,339	89.4	(88.3-90.4)

^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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	282	8,624	8.1	(7.0-9.3)
Maternal Age				
<20 Years	13	406	9.0**	(4.5-17.3)
20-29 Years	125	3,956	7.4	(5.9-9.2)
30+ Years	144	4,262	8.8	(7.2-10.7)
Race/Ethnicity				
White, non-Hispanic	144	4,875	6.7	(5.5-8.3)
Black, non-Hispanic	96	2,264	11.6	(9.7-13.9)
Hispanic	13	532	8.0**	(3.7-16.6)
Asian/Pacific Islander, non-Hispanic	10	194	6.7**	(3.4-12.7)
Other, non-Hispanic	18	731	14.8**	(7.9-26.0)
Education				
<High School	43	1,571	14.9	(10.1-21.5)
HS Grad/GED	69	2,457	8.9	(6.6-11.9)
Some College	83	2,152	6.9	(5.3-9.0)
College Degree+	84	2,365	6.6	(5.0-8.6)
Pregnancy Insurance Status				
Medicaid/Public	121	4,286	10.8	(8.6-13.6)
Private	139	3,658	6.2	(5.1-7.4)
Marital Status				
Married	146	4,145	6.6	(5.4-8.0)
Other	136	4,479	10.3	(8.4-12.6)
Parity				
No previous live birth	100	2,532	6.8	(5.5-8.4)
1	81	2,383	6.5	(4.8-8.6)
2+	101	3,709	11.4	(8.9-14.6)
Last Year's Household Income				
<$16,000	65	1,985	10.4	(7.7-14.1)
$16,001-$24,000	43	1,680	11.8	(7.9-17.1)
$24,001-$40,000	40	1,225	8.8	(5.9-12.9)
$40,001-$60,000	32	1,013	7.2	(4.6-11.1)
$60,001+	70	1,721	5.0	(3.7-6.6)

^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, 2018

Breastfeeding duration categories	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Did not Breastfeed	319	13,608	13.1	(11.3-15.1)
Breastfed at least 4 weeks	1,230	77,141	74.4	(71.8-76.8)
Breastfed at least 8 weeks	1,054	66,876	64.5	(61.7-67.3)
Breastfed at least 12 weeks	866	56,876	58.0	(55.0-60.9)

Table 56. Reasons for not initiating breastfeeding, MI PRAMS, 2018

Reasons for not initiating breastfeeding	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Reasons (non-exclusive)				
Mom did not want to breastfeed	133	4,941	34.6	(27.9-42.0)
Mom did not like breastfeeding	99	4,232	29.6	(23.2-37.0)
Mom had other children to take care of	61	2,716	19.0	(13.6-26.0)
Mom tried but it was too hard	57	2,516	17.6	(12.6-24.2)
Mom returned to work	54	2,263	15.9	(11.0-22.4)
Mom was sick or on medicine	48	1,964	13.8	(9.3-19.9)
Mom had too many other household duties	44	1,313	9.2	(5.9-14.1)
Baby was in the hospital	12	335	2.3	(1.3-4.1)
Mom returned to school	10	221	1.5**	(0.8-3.0)
Other	52	2,686	18.8	(13.4-25.7)

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

Table 57. Cumulative number of reasons for not initiating breastfeeding, MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-1 reason	192	8,671	60.7	(53.2-67.8)
2 reasons	74	3,018	21.1	(15.6-27.9)
3 reasons	35	1,434	10.0	(6.2-15.8)
4+ reasons	32	1,153	8.1	(4.9-13.1)

Table 58. Prevalence of breastfeeding initiation by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,479	90,117	86.9	(84.9-88.7)
Maternal Age				
<20 Years	70	3,540	80.4	(68.2-88.6)
20-29 Years	757	44,277	85.3	(82.2-87.9)
30+ Years	652	42,300	89.2	(86.3-91.6)
Race/Ethnicity				
White, non-Hispanic	705	63,243	89.1	(86.4-91.4)
Black, non-Hispanic	614	13,841	74.4	(71.1-77.3)
Hispanic	61	5,814	90.9**	(80.0-96.2)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	55	4,060	88.1**	(75.0-94.8)
Education				
<High School	126	7,442	73.1	(65.1-79.8)
HS Grad/GED	370	20,718	77.8	(72.7-82.2)
Some College	477	25,855	86.2	(81.9-89.6)
College Degree+	485	34,855	98.0**	(96.0-99.0)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	603	30,620	78.5	(74.5-82.0)
Private	770	53,431	92.6	(90.2-94.4)
Marital Status				
Married	788	57,013	92.7	(90.2-94.5)
Other	691	33,103	78.7	(75.1-82.0)
Parity				
No previous live birth	583	32,470	89.2	(85.9-91.8)
1	455	31,611	88.5	(84.8-91.4)
2+	441	26,036	82.4	(78.2-85.9)
Last Year's Household Income				
<$16,000	315	14,077	76.8	(71.3-81.5)
$16,001-$24,000	205	11,212	80.3	(73.2-85.9)
$24,001-$40,000	198	11,780	85.4	(78.0-90.6)
$40,001-$60,000	172	12,401	88.4	(81.6-92.9)
$60,001+	439	32,744	96.4	(93.8-97.9)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 59. Prevalence of 1-month breastfeeding duration by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,230	77,141	74.4	(71.8-76.8)
Maternal Age				
<20 Years	49	2,444	55.0	(41.7-67.7)
20-29 Years	607	36,189	69.8	(65.9-73.5)
30+ Years	574	38,508	81.2	(77.7-84.3)
Race/Ethnicity				
White, non-Hispanic	605	54,486	76.9	(73.5-80.1)
Black, non-Hispanic	477	10,741	58.1	(54.5-61.6)
Hispanic	56	5,279	81.1	(68.5-89.4)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	51	3,726	79.3**	(64.6-89.0)
Education				
<High School	83	4,931	48.3	(39.1-57.6)
HS Grad/GED	290	16,883	63.2	(57.5-68.6)
Some College	397	22,387	74.5	(69.4-78.9)
College Degree+	442	31,782	89.9	(86.4-92.5)
Post Pregnancy Insurance Status				
Uninsured	45	2,824	80.7**	(65.4-90.3)
Medicaid/Public	452	23,357	59.9	(55.2-64.5)
Private	690	48,409	84.2	(81.1-86.9)
Marital Status				
Married	715	52,258	84.8	(81.8-87.5)
Other	515	24,883	59.3	(54.9-63.6)
Parity				
No previous live birth	474	26,891	74.0	(69.6-77.9)
1	389	27,856	77.9	(73.3-81.9)
2+	367	22,395	71.0	(66.0-75.5)
Last Year's Household Income				
<$16,000	226	10,062	54.9	(48.3-61.3)
$16,001-$24,000	157	8,986	64.1	(56.1-71.5)
$24,001-$40,000	169	10,501	75.7	(67.7-82.2)
$40,001-$60,000	151	10,937	78.1	(70.2-84.4)
$60,001+	402	29,953	88.6	(84.8-91.5)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 60. Prevalence of 2-month breastfeeding duration by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,054	66,876	64.5	(61.7-67.3)
Maternal Age				
<20 Years	36	1,857	41.8	(29.4-55.3)
20-29 Years	507	30,737	59.4	(55.2-63.4)
30+ Years	511	34,281	72.3	(68.3-76.0)
Race/Ethnicity				
White, non-Hispanic	523	47,200	66.6	(62.9-70.2)
Black, non-Hispanic	395	8,807	47.6	(44.0-51.2)
Hispanic	50	4,636	71.2	(57.9-81.6)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	45	3,323	72.1	(57.0-83.5)
Education				
<High School	67	3,947	38.6	(29.9-48.2)
HS Grad/GED	224	13,571	50.8	(44.9-56.7)
Some College	338	18,581	62.0	(56.5-67.2)
College Degree+	407	29,618	83.7	(79.7-87.1)
Post Pregnancy Insurance Status				
Uninsured	37	2,439	69.7	(53.0-82.5)
Medicaid/Public	363	19,172	49.2	(44.4-54.0)
Private	617	43,105	75.0	(71.4-78.3)
Marital Status				
Married	642	47,126	76.6	(73.1-79.8)
Other	412	19,750	47.1	(42.7-51.6)
Parity				
No previous live birth	401	23,042	63.4	(58.7-67.8)
1	328	24,143	67.6	(62.6-72.3)
2+	325	19,691	62.4	(57.1-67.4)
Last Year's Household Income				
<$16,000	179	7,800	42.6	(36.1-49.3)
$16,001-$24,000	119	7,382	53.0	(44.9-61.0)
$24,001-$40,000	142	8,790	63.3	(54.9-71.1)
$40,001-$60,000	132	9,302	66.4	(57.9-74.0)
$60,001+	372	27,707	82.0	(77.6-85.6)

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

Table 61. Prevalence of 3-month breastfeeding duration by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	866	56,876	58.0	(55.0-60.9)
Maternal Age				
<20 Years	21	1,333	30.8	(19.6-44.9)
20-29 Years	409	25,780	52.5	(48.2-56.8)
30+ Years	436	29,763	66.6	(62.3-70.7)
Race/Ethnicity				
White, non-Hispanic	448	40,506	60.9	(56.9-64.7)
Black, non-Hispanic	299	6,611	36.9	(33.4-40.5)
Hispanic	46	4,232	71.3	(57.5-82.1)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	34	2,807	61.3	(46.1-74.6)
Education				
<High School	47	3,246	33.3	(24.6-43.3)
HS Grad/GED	170	11,339	44.3	(38.3-50.3)
Some College	265	14,554	52.0	(46.3-57.6)
College Degree+	371	27,009	80.9	(76.5-84.6)
Post Pregnancy Insurance Status				
Uninsured	26	1,778	57.9	(40.4-73.6)
Medicaid/Public	277	15,645	42.0	(37.1-47.0)
Private	527	37,307	68.9	(65.0-72.5)
Marital Status				
Married	562	41,313	71.7	(67.8-75.2)
Other	304	15,563	38.6	(34.2-43.2)
Parity				
No previous live birth	319	18,919	55.4	(50.6-60.1)
1	275	20,888	62.3	(57.0-67.3)
2+	272	17,070	56.1	(50.6-61.5)
Last Year's Household Income				
<$16,000	132	5,935	33.9	(27.6-40.7)
$16,001-$24,000	89	5,877	43.8	(35.7-52.2)
$24,001-$40,000	114	7,292	56.5	(47.7-64.9)
$40,001-$60,000	110	7,988	61.2	(52.4-69.3)
$60,001+	331	24,483	77.6	(72.8-81.8)

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

Table 62. Reasons for stopping breastfeeding, MI PRAMS, 2018

Reasons (non-exclusive)	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Wasn't Producing Enough Milk	364	18,658	50.3	(45.4-55.1)
Breastmilk Didn't Satisfy Baby	207	12,164	32.8	(28.4-37.6)
Baby Had Difficulty Nursing or Latching	220	12,878	34.7	(30.2-39.5)
Nipples Were Sore, Cracked, or Bleeding	167	8,869	23.9	(20.0-28.3)
Went Back to Work	161	7,828	21.1	(17.4-25.3)
Too Many Household Duties	108	5,574	15.0	(11.9-18.7)
It Was Right Time to Stop	80	3,394	9.1	(6.9-12.0)
Baby Wasn't Gaining Weight	87	5,041	13.6	(10.6-17.3)
I Was Sick	54	3,053	8.2	(5.9-11.4)
Baby Was Jaundiced	63	3,551	9.6	(7.0-12.9)
Went Back to School	27	1,303	3.5	(2.1-5.8)
Partner Didn't Support	15	550	1.5**	(0.8-2.7)
Other	119	7,356	19.8	(16.1-24.1)

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

Table 63. Breastfeeding information sources before or after delivery, MI PRAMS, 2018

Breastfeeding information source	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Information sources (non-exclusive)				
Mom's doctor	1,473	83,375	81.1	(78.7-83.4)
Nurse or midwife	1,351	78,503	77.1	(74.5-79.5)
Breastfeeding or lactation specialist	1,282	72,600	71.1	(68.3-73.8)
Baby's doctor	1,231	69,118	68.6	(65.7-71.3)
Family or friends	1,064	61,583	60.8	(57.8-63.7)
Breastfeeding support group	508	25,075	25.3	(22.8-27.9)
Hotline or toll-free number	228	11,307	11.5	(9.7-13.5)
Other	209	11,099	13.8	(11.7-16.2)

Table 64. Total number of breastfeeding information sources, MI PRAMS, 2018

Number of sources of breastfeeding information	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0	51	3,701	3.6	(2.6-4.9)
1	118	7,192	6.9	(5.6-8.6)
2	172	10,096	9.7	(8.1-11.6)
3	284	15,714	15.1	(13.1-17.4)
4	392	25,166	24.2	(21.7-26.9)
5	412	23,298	22.4	(20.1-25.0)
6	225	11,839	11.4	(9.7-13.4)

Table 65. Did mother ever use a breast pump, MI PRAMS, 2018

Breast pump usage	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Yes	1,296	81,112	90.3	(88.3-92.0)
No	175	8,708	9.7	(8.0-11.7)

Table 66. Source of breast pump, MI PRAMS, 2018

Source of breast pump	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Breast Pump Source (non-exclusive)				
Free from hospital	459	24,963	30.5	(27.5-33.6)
Bought new from store or online	251	15,932	19.5	(16.9-22.3)
Had one from previous child	162	12,322	15.0	(12.8-17.7)
Previously used by someone else	80	6,012	7.3	(5.7-9.5)
New as a gift	73	3,476	4.3	(3.1-5.7)
Bought new from hospital or doctor's office	61	3,290	4.0	(2.9-5.5)
New from WIC	71	3,502	4.3	(3.1-5.9)
Rented from hospital or doctor's office	24	1,102	1.3	(0.8-2.3)
Other	424	28,592	34.9	(31.8-38.2)

Table 67. Prevalence of ever using a breast pump by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,296	81,112	90.3	(88.3-92.0)
Maternal Age				
<20 Years	61	3,158	88.3	(76.5-94.6)
20-29 Years	647	38,955	88.6	(85.4-91.2)
30+ Years	588	39,000	92.2	(89.4-94.4)
Race/Ethnicity				
White, non-Hispanic	658	58,864	93.2	(90.7-95.0)
Black, non-Hispanic	500	11,381	82.5	(79.1-85.5)
Hispanic	53	4,976	85.6**	(73.2-92.8)
Asian/Pacific Islander, non-Hispanic	33	2,167	79.7**	(59.3-91.3)
Other, non-Hispanic	*	*	*	*
Education				
<High School	97	6,030	80.5	(70.7-87.6)
HS Grad/GED	293	17,179	83.1	(77.7-87.5)
Some College	429	24,010	93.8	(90.5-96.0)
College Degree+	461	32,967	94.7	(91.8-96.6)
Post Pregnancy Insurance Status				
Uninsured	47	2,880	89.9**	(76.5-96.1)
Medicaid/Public	490	25,683	84.7	(80.3-88.2)
Private	716	50,017	93.9	(91.6-95.6)
Marital Status				
Married	727	53,007	92.9	(90.5-94.7)
Other	569	28,105	85.8	(82.0-88.9)
Parity				
No previous live birth	529	30,240	94.0	(91.4-95.8)
1	402	28,502	89.5	(85.6-92.5)
2+	365	22,369	86.7	(82.2-90.1)
Last Year's Household Income				
<$16,000	256	11,725	83.8	(77.2-88.7)
$16,001-$24,000	167	9,453	84.4	(77.0-89.7)
$24,001-$40,000	178	10,991	93.6	(87.6-96.8)
$40,001-$60,000	157	11,429	93.2	(87.0-96.5)
$60,001+	425	31,501	95.9	(93.2-97.6)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 68. Baby health indicators,
MI PRAMS, 2018

Health Indicators	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Baby got breast milk from source other than mom	163	8,182	8.0	(6.6-9.7)
Baby has a doctor, nurse, or medical practice where he or she is seen on a regular basis	1,603	94,585	92.7	(91.0-94.1)
Baby will see a dentist by his or her first birthday	1,216	64,411	65.5	(62.6-68.4)

Table 69. Distribution of WIC status during pregnancy,
MI PRAMS, 2018

WIC Status	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
No^	1,003	66,336	62.8	(59.9-65.5)
Yes	847	39,338	37.2	(34.5-40.1)

^ 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, 2018

Baby Sleep - Alone	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Always	1,076	66,310	64.2	(61.3-66.9)
Often/Almost Always	326	18,133	17.5	(15.4-19.9)
Sometimes	185	9,204	8.9	(7.4-10.7)
Rarely	93	4,063	3.9	(3.0-5.1)
Never	103	5,633	5.5	(4.3-6.9)

Table 71. Infant slept in his/her own crib or bed in mother's room, MI PRAMS, 2018

Baby in Room with Mom	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Yes	1,375	76,734	78.6	(76.0-81.1)
No	299	20,832	21.4	(18.9-24.0)

Table 72. Infant sleep space characteristics, MI PRAMS, 2018

Baby Sleep Space	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Characteristics (non-exclusive)				
Crib/Bassinet	1,660	97,110	94.0	(92.5-95.3)
Car Seat/Swing	742	46,418	45.6	(42.7-48.6)
Sleep Sack/Wearable Blanket	675	46,420	46.0	(43.1-49.0)
With Blanket	620	35,523	35.2	(32.3-38.1)
Mattress/Bed	453	21,738	21.4	(19.2-23.9)
With Bumper Pads	160	8,553	8.6	(7.0-10.4)
Couch/Sofa	156	7,932	7.8	(6.4-9.6)
With Toys, Cushions, Pillows	90	4,375	4.3	(3.3-5.7)

Table 73. Primary infant sleep position, MI PRAMS, 2018

Primary Infant Sleep Position	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Back	1,414	85,511	82.5	(80.2-84.6)
Stomach	147	7,048	6.8	(5.5-8.4)
Side	155	7,726	7.5	(6.1-9.1)
Side/Back	34	1,624	1.6	(1.0-2.5)
Side/Stomach	9	381	0.4**	(0.2-0.9)
Back/Stomach	16	768	0.7**	(0.4-1.4)
All 3 Positions	13	538	0.5**	(0.2-1.1)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution

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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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,402	84,442	81.7	(79.4-83.8)
Maternal Age				
<20 Years	64	3,273	74.3	(61.9-83.8)
20-29 Years	730	41,698	80.6	(77.1-83.6)
30+ Years	608	39,471	83.7	(80.3-86.6)
Race/Ethnicity				
White, non-Hispanic	669	60,973	86.2	(83.3-88.7)
Black, non-Hispanic	604	13,006	70.4	(67.0-73.6)
Hispanic	55	5,100	78.6	(65.3-87.7)
Asian/Pacific Islander, non-Hispanic	27	1,929	71.2	(52.7-84.5)
Other, non-Hispanic	43	3,087	68.3	(52.8-80.6)
Education				
<High School	160	7,987	78.6	(70.2-85.2)
HS Grad/GED	393	21,026	79.2	(74.1-83.5)
Some College	422	23,939	80.1	(75.5-84.0)
College Degree+	411	30,385	85.9	(82.1-88.9)
Post Pregnancy Insurance Status				
Uninsured	52	2,974	84.3**	(69.1-92.8)
Medicaid/Public	619	30,282	78.1	(74.0-81.7)
Private	678	48,287	84.2	(81.2-86.8)
Marital Status				
Married	703	52,011	84.8	(81.8-87.5)
Other	698	32,271	77.1	(73.3-80.4)
Parity				
No previous live birth	504	29,320	81.0	(77.3-84.3)
1	424	29,729	83.0	(78.8-86.4)
2+	474	25,394	81.1	(76.4-85.0)
Last Year's Household Income				
<$16,000	358	14,320	78.4	(72.6-83.2)
$16,001-$24,000	188	10,976	78.8	(71.9-84.3)
$24,001-$40,000	166	10,673	77.7	(70.1-83.8)
$40,001-$60,000	151	11,424	81.8	(74.7-87.3)
$60,001+	392	29,879	88.3	(84.6-91.2)

**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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,375	76,734	78.6	(76.0-81.1)
Maternal Age				
<20 Years	*	*	*	*
20-29 Years	743	40,028	81.6	(78.0-84.8)
30+ Years	549	32,723	73.8	(69.6-77.6)
Race/Ethnicity				
White, non-Hispanic	536	49,790	74.1	(70.6-77.4)
Black, non-Hispanic	696	15,261	89.0	(86.4-91.2)
Hispanic	54	5,252	87.1**	(75.2-93.8)
Asian/Pacific Islander, non-Hispanic	30	2,030	85.3**	(66.2-94.5)
Other, non-Hispanic	54	3,980	90.1**	(76.5-96.2)
Education				
<High School	183	8,779	91.5	(83.9-95.7)
HS Grad/GED	420	21,283	85.6	(80.5-89.5)
Some College	434	23,210	81.7	(76.9-85.7)
College Degree+	318	22,217	66.4	(61.4-71.1)
Post Pregnancy Insurance Status				
Uninsured	48	2,924	86.2**	(72.9-93.5)
Medicaid/Public	707	32,790	90.4	(87.0-93.0)
Private	568	38,142	69.9	(66.0-73.6)
Marital Status				
Married	599	42,295	72.5	(68.7-75.9)
Other	775	34,280	87.8	(84.5-90.5)
Parity				
No previous live birth	477	25,321	74.6	(70.0-78.7)
1	410	26,328	77.3	(72.4-81.5)
2+	488	25,085	84.9	(80.5-88.4)
Last Year's Household Income				
<$16,000	402	16,213	92.1	(87.4-95.1)
$16,001-$24,000	205	10,995	86.2	(79.6-90.9)
$24,001-$40,000	179	10,558	83.4	(75.8-88.9)
$40,001-$60,000	139	10,403	79.6	(71.7-85.7)
$60,001+	293	21,295	65.3	(60.1-70.2)

*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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,660	97,110	94.0	(92.5-95.3)
Maternal Age				
<20 Years	82	3,925	92.1**	(80.8-97.0)
20-29 Years	869	48,416	93.4	(91.0-95.2)
30+ Years	709	44,769	94.9	(92.6-96.5)
Race/Ethnicity				
White, non-Hispanic	734	67,028	94.6	(92.5-96.1)
Black, non-Hispanic	766	16,937	92.2	(90.0-93.9)
Hispanic	60	5,592	90.0**	(78.5-95.7)
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	190	9,383	94.5	(88.7-97.4)
HS Grad/GED	466	24,321	92.2	(88.2-94.9)
Some College	514	28,183	93.7	(90.6-95.8)
College Degree+	469	33,955	95.5	(92.9-97.1)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	759	36,150	93.6	(90.9-95.5)
Private	783	54,244	94.4	(92.3-96.0)
Marital Status				
Married	804	58,981	96.1	(94.3-97.3)
Other	855	37,969	91.0	(88.0-93.3)
Parity				
No previous live birth	611	34,175	94.3	(91.8-96.0)
1	502	33,846	94.4	(91.6-96.4)
2+	547	29,089	93.3	(89.8-95.6)
Last Year's Household Income				
<$16,000	423	17,058	94.2	(90.2-96.6)
$16,001-$24,000	236	13,055	93.2	(88.3-96.1)
$24,001-$40,000	206	12,314	89.7	(83.1-94.0)
$40,001-$60,000	180	13,040	94.2	(88.7-97.1)
$60,001+	435	32,805	96.1	(93.6-97.7)

^Wording in question is "crib, bassinet, or pack and play".
**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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	453	21,738	21.4	(19.2-23.9)
Maternal Age				
<20 Years	37	1,222	28.7	(18.7-41.3)
20-29 Years	255	11,968	23.6	(20.3-27.2)
30+ Years	161	8,548	18.4	(15.2-22.1)
Race/Ethnicity				
White, non-Hispanic	112	11,142	15.9	(13.2-19.1)
Black, non-Hispanic	289	6,676	37.0	(33.6-40.7)
Hispanic	13	1,240	20.6	(11.6-33.9)
Asian/Pacific Islander, non-Hispanic	18	1,341	54.9	(36.2-72.3)
Other, non-Hispanic	18	1,062	23.2	(13.2-37.6)
Education				
<High School	53	2,012	21.3	(14.8-29.7)
HS Grad/GED	142	6,752	26.1	(21.3-31.6)
Some College	163	7,608	25.5	(21.1-30.5)
College Degree+	88	5,094	14.5	(11.4-18.4)
Post Pregnancy Insurance Status				
Uninsured	16	768	23.6**	(12.2-40.6)
Medicaid/Public	232	10,104	26.5	(22.5-30.9)
Private	181	9,818	17.3	(14.6-20.5)
Marital Status				
Married	158	10,129	16.7	(14.0-19.9)
Other	295	11,609	28.5	(24.7-32.6)
Parity				
No previous live birth	191	8,071	22.7	(19.2-26.7)
1	132	7,022	20.1	(16.3-24.5)
2+	130	6,645	21.5	(17.3-26.4)
Last Year's Household Income				
<$16,000	123	4,784	27.2	(21.7-33.5)
$16,001-$24,000	87	4,425	33.1	(25.9-41.1)
$24,001-$40,000	63	3,293	24.1	(17.7-31.9)
$40,001-$60,000	39	2,222	16.3	(11.1-23.2)
$60,001+	74	4,503	13.3	(10.3-17.2)

Table 78. Prevalence of infant usually sleeping on a couch, sofa, or armchair by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	156	7,932	7.8	(6.4-9.6)
Maternal Age				
<20 Years	10	339	8.1**	(3.6-17.1)
20-29 Years	83	4,204	8.3	(6.3-10.9)
30+ Years	63	3,389	7.3	(5.3-10.0)
Race/Ethnicity				
White, non-Hispanic	52	4,919	7.0	(5.3-9.3)
Black, non-Hispanic	89	1,885	10.5	(8.5-12.9)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	*	*	*	*
Education				
<High School	16	866	9.1**	(4.6-17.2)
HS Grad/GED	44	1,838	7.1	(4.7-10.5)
Some College	55	2,656	8.9	(6.2-12.6)
College Degree+	38	2,509	7.2	(5.0-10.3)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	81	3,406	8.9	(6.6-12.0)
Private	65	4,107	7.3	(5.4-9.6)
Marital Status				
Married	59	3,928	6.5	(4.8-8.7)
Other	97	4,005	9.9	(7.5-12.9)
Parity				
No previous live birth	65	3,192	9.0	(6.7-12.0)
1	46	3,081	8.8	(6.2-12.5)
2+	45	1,659	5.4	(3.5-8.1)
Last Year's Household Income				
<$16,000	42	1,610	9.2	(6.1-13.6)
$16,001-$24,000	25	1,294	9.7	(5.7-16.0)
$24,001-$40,000	19	711	5.2**	(2.6-10.2)
$40,001-$60,000	20	1,174	8.8	(5.0-14.9)
$60,001+	34	2,472	7.3	(5.0-10.5)

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

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

Table 79. Prevalence of infant usually sleeping in an infant car seat or swing by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	742	46,418	45.6	(42.7-48.6)
Maternal Age				
<20 Years	40	2,112	50.1	(36.7-63.6)
20-29 Years	382	23,784	46.6	(42.4-50.9)
30+ Years	320	20,522	44.2	(39.8-48.6)
Race/Ethnicity				
White, non-Hispanic	354	32,968	47.2	(43.3-51.1)
Black, non-Hispanic	316	7,278	40.5	(36.9-44.1)
Hispanic	26	2,412	38.5	(26.4-52.2)
Asian/Pacific Islander, non-Hispanic	13	896	35.7	(20.3-54.8)
Other, non-Hispanic	30	2,543	54.8	(39.9-68.9)
Education				
<High School	79	4,298	44.7	(35.3-54.4)
HS Grad/GED	196	11,776	44.7	(38.9-50.8)
Some College	239	13,421	45.1	(39.7-50.7)
College Degree+	216	16,056	46.3	(41.2-51.4)
Post Pregnancy Insurance Status				
Uninsured	23	1,440	42.7	(27.1-59.9)
Medicaid/Public	321	17,445	45.7	(40.9-50.6)
Private	365	25,542	45.2	(41.3-49.2)
Marital Status				
Married	367	27,831	45.9	(42.0-49.9)
Other	375	18,587	45.4	(40.9-49.9)
Parity				
No previous live birth	291	17,726	49.9	(45.1-54.6)
1	234	16,358	46.6	(41.3-52.0)
2+	217	12,333	39.7	(34.5-45.2)
Last Year's Household Income				
<$16,000	164	7,982	45.2	(38.5-52.0)
$16,001-$24,000	114	6,449	47.4	(39.2-55.6)
$24,001-$40,000	84	5,069	37.1	(29.4-45.6)
$40,001-$60,000	80	5,875	43.8	(35.5-52.5)
$60,001+	218	16,598	49.1	(44.0-54.3)

Table 80. Prevalence of infant usually sleeping in a sleep sack or wearable blanket by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	675	46,420	46.0	(43.1-49.0)
Maternal Age				
<20 Years	24	1,130	26.3	(16.0-40.2)
20-29 Years	308	20,528	40.6	(36.5-44.9)
30+ Years	343	24,762	53.8	(49.4-58.2)
Race/Ethnicity				
White, non-Hispanic	418	36,974	53.0	(49.1-56.9)
Black, non-Hispanic	197	4,455	25.0	(21.9-28.3)
Hispanic	25	2,413	39.3	(27.0-53.0)
Asian/Pacific Islander, non-Hispanic	16	1,142	47.7	(29.5-66.6)
Other, non-Hispanic	18	1,408	32.8	(20.0-48.9)
Education				
<High School	43	2,543	26.6	(18.7-36.2)
HS Grad/GED	144	9,675	37.2	(31.5-43.3)
Some College	192	11,761	39.9	(34.6-45.5)
College Degree+	286	21,966	63.6	(58.6-68.3)
Post Pregnancy Insurance Status				
Uninsured	18	1,182	36.3	(21.3-54.6)
Medicaid/Public	216	11,886	31.4	(26.9-36.2)
Private	423	32,265	57.4	(53.4-61.3)
Marital Status				
Married	428	32,875	54.8	(50.8-58.7)
Other	246	13,385	32.9	(28.7-37.4)
Parity				
No previous live birth	279	17,582	49.7	(44.9-54.5)
1	218	16,629	47.7	(42.4-53.1)
2+	178	12,209	39.9	(34.5-45.4)
Last Year's Household Income				
<$16,000	122	5,925	33.5	(27.3-40.4)
$16,001-$24,000	72	4,809	36.1	(28.5-44.5)
$24,001-$40,000	70	5,104	37.6	(29.6-46.3)
$40,001-$60,000	75	6,071	45.7	(37.2-54.4)
$60,001+	290	22,339	66.7	(61.7-71.4)

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

Table 81. Prevalence of infant usually sleeping with a blanket by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	620	35,523	35.2	(32.3-38.1)
Maternal Age				
<20 Years	44	2,059	48.7	(35.4-62.2)
20-29 Years	355	19,921	39.4	(35.2-43.6)
30+ Years	221	13,542	29.4	(25.4-33.6)
Race/Ethnicity				
White, non-Hispanic	235	23,061	33.2	(29.6-37.0)
Black, non-Hispanic	317	7,049	39.4	(35.8-43.0)
Hispanic	26	2,628	42.0	(29.4-55.7)
Asian/Pacific Islander, non-Hispanic	13	690	27.5**	(13.8-47.4)
Other, non-Hispanic	27	1,904	43.2	(29.0-58.6)
Education				
<High School	71	4,253	44.7	(35.3-54.6)
HS Grad/GED	215	11,016	42.5	(36.7-48.5)
Some College	194	10,774	36.4	(31.2-42.0)
College Degree+	131	9,062	26.1	(21.9-30.9)
Post Pregnancy Insurance Status				
Uninsured	20	1,263	38.6	(23.3-56.7)
Medicaid/Public	324	16,302	43.0	(38.2-47.9)
Private	249	16,751	29.7	(26.2-33.6)
Marital Status				
Married	243	17,734	29.5	(25.9-33.3)
Other	377	17,789	43.8	(39.3-48.3)
Parity				
No previous live birth	232	12,232	34.5	(30.1-39.2)
1	183	12,604	36.2	(31.1-41.5)
2+	205	10,687	34.8	(29.8-40.3)
Last Year's Household Income				
<$16,000	166	7,260	41.1	(34.5-47.9)
$16,001-$24,000	114	6,543	49.4	(41.1-57.6)
$24,001-$40,000	76	4,480	32.7	(25.2-41.2)
$40,001-$60,000	58	3,776	28.5	(21.4-36.8)
$60,001+	118	9,101	27.1	(22.7-32.0)

Table 82. Prevalence of infant usually sleeping with toys, cushions, or pillows by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	90	4,375	4.3	(3.3-5.7)
Maternal Age				
<20 Years	10	655	15.5**	(7.4-29.6)
20-29 Years	41	1,863	3.7	(2.4-5.6)
30+ Years	39	1,857	4.0	(2.7-5.9)
Race/Ethnicity				
White, non-Hispanic	24	2,242	3.2	(2.1-5.0)
Black, non-Hispanic	52	1,171	6.5	(4.9-8.6)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	7	432	9.5**	(3.8-21.9)
Education				
<High School	*	*	*	*
HS Grad/GED	31	1,603	6.2	(4.0-9.6)
Some College	27	1,228	4.1	(2.5-6.8)
College Degree+	17	891	2.6	(1.4-4.5)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	44	1,890	5.0	(3.3-7.4)
Private	37	1,892	3.4	(2.2-5.0)
Marital Status				
Married	35	2,085	3.4	(2.3-5.2)
Other	55	2,290	5.7	(4.0-8.0)
Parity				
No previous live birth	39	2,000	5.6	(3.8-8.3)
1	22	1,403	4.0	(2.4-6.8)
2+	29	972	3.2	(1.9-5.1)
Last Year's Household Income				
<$16,000	20	869	5.0	(2.8-8.7)
$16,001-$24,000	10	367	2.7**	(1.1-6.7)
$24,001-$40,000	11	447	3.3**	(1.5-6.8)
$40,001-$60,000	16	1,067	8.0	(4.4-14.0)
$60,001+	16	999	3.0**	(1.6-5.4)

*Data not shown due to small sample size and/or relative standard error > 50%.
**Relative standard error (RSE) exceeds 30%. Interpret with caution.

Table 83. Prevalence of infant usually sleeping with crib bumper pads (mesh or non-mesh) by maternal characteristics, MI PRAMS, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	160	8,553	8.6	(7.0-10.4)
Maternal Age				
<20 Years	13	394	10.2**	(5.0-19.8)
20-29 Years	89	4,720	9.4	(7.2-12.3)
30+ Years	58	3,439	7.5	(5.5-10.2)
Race/Ethnicity				
White, non-Hispanic	52	4,865	7.1	(5.3-9.4)
Black, non-Hispanic	86	1,959	11.0	(8.9-13.6)
Hispanic	*	*	*	*
Asian/Pacific Islander, non-Hispanic	*	*	*	*
Other, non-Hispanic	15	1,043	23.7	(13.0-39.0)
Education				
<High School	19	1,287	14.6	(8.4-24.2)
HS Grad/GED	56	2,351	9.2	(6.4-13.1)
Some College	54	2,742	9.3	(6.6-12.9)
College Degree+	28	2,071	6.0	(4.0-9.0)
Post Pregnancy Insurance Status				
Uninsured	*	*	*	*
Medicaid/Public	78	3,719	10.0	(7.4-13.4)
Private	68	4,078	7.3	(5.5-9.6)
Marital Status				
Married	62	4,463	7.5	(5.6-9.9)
Other	98	4,090	10.3	(7.8-13.3)
Parity				
No previous live birth	68	2,991	8.6	(6.3-11.5)
1	45	3,196	9.3	(6.5-13.1)
2+	47	2,366	7.7	(5.3-11.1)
Last Year's Household Income				
<$16,000	44	1,465	8.6	(5.6-12.8)
$16,001-$24,000	30	1,216	9.1	(5.5-14.8)
$24,001-$40,000	20	1,526	11.2	(6.8-17.9)
$40,001-$60,000	14	886	6.7	(3.5-12.4)
$60,001+	28	2,058	6.1	(4.0-9.2)

*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, 2018

Characteristic	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Total	1,414	85,511	82.5	(80.2-84.6)
Maternal Age				
<20 Years	62	3,441	78.2	(66.8-86.4)
20-29 Years	718	41,937	80.9	(77.5-83.8)
30+ Years	634	40,134	84.8	(81.3-87.7)
Race/Ethnicity				
White, non-Hispanic	683	61,405	86.7	(83.8-89.2)
Black, non-Hispanic	587	12,804	69.1	(65.6-72.3)
Hispanic	57	5,323	82.0	(69.3-90.2)
Asian/Pacific Islander, non-Hispanic	33	2,345	83.5**	(64.6-93.3)
Other, non-Hispanic	50	3,286	72.5	(56.7-84.1)
Education				
<High School	158	7,922	80.2	(71.6-86.6)
HS Grad/GED	370	20,271	76.0	(70.8-80.6)
Some College	434	24,738	81.8	(77.4-85.5)
College Degree+	433	31,405	88.5	(84.8-91.4)
Post Pregnancy Insurance Status				
Uninsured	49	3,182	90.2**	(79.6-95.5)
Medicaid/Public	621	29,536	76.4	(72.1-80.2)
Private	696	50,134	87.0	(84.2-89.4)
Marital Status				
Married	715	52,561	85.3	(82.2-87.9)
Other	698	32,790	78.5	(74.8-81.7)
Parity				
No previous live birth	517	30,217	83.2	(79.6-86.3)
1	420	29,937	83.3	(79.2-86.7)
2+	477	25,357	80.9	(76.1-84.9)
Last Year's Household Income				
<$16,000	340	13,926	76.2	(70.4-81.2)
$16,001-$24,000	197	10,668	76.8	(69.2-83.0)
$24,001-$40,000	167	10,698	77.1	(69.5-83.2)
$40,001-$60,000	164	12,356	88.5	(82.4-92.7)
$60,001+	406	30,975	91.1	(87.8-93.6)

^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.

**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, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Life Stressors (non-exclusive)				
I moved to a new address	627	36,690	34.8	(32.0-37.6)
A close family member was very sick and had to go to the hospital	474	28,872	27.4	(24.8-30.1)
Someone very close to me died	442	22,056	20.9	(18.7-23.3)
I argued with my husband or partner more than usual	387	19,398	18.4	(16.3-20.8)
I had to live with a friend or family member	342	17,088	16.2	(14.2-18.4)
I had problems paying the rent, mortgage, or other bills	330	17,067	16.2	(14.1-18.5)
My husband, partner, or I had a cut in work hours or pay	265	15,460	14.7	(12.7-17.0)
I lost my job even though I wanted to go on working	252	10,822	10.3	(8.7-12.1)
Someone very close to me had a problem with drinking or drugs	205	12,395	11.8	(9.9-13.9)
My husband or partner lost his job	185	10,010	9.5	(7.9-11.4)
My husband or partner said he didn't want me to be pregnant	156	7,160	6.8	(5.5-8.3)
I got divorced or separated from my husband or partner	133	6,187	5.9	(4.6-7.4)
My husband, partner, or I went to jail	109	3,930	3.7	(2.8-4.9)
I was homeless or had to sleep outside, in a car, or in a shelter	96	3,462	3.3	(2.5-4.3)
I was apart from my husband or partner because of deployment or extended work-related travel	55	3,323	3.2	(2.3-4.4)

Table 86. Cumulative number of life stressors experienced by mothers in 12 months before delivery, MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0	497	30,649	29.0	(26.4-31.7)
1	403	23,844	22.6	(20.2-25.1)
2	313	18,557	17.6	(15.4-19.9)
3	206	11,462	10.8	(9.1-12.8)
4	139	6,536	6.2	(5.0-7.7)
5	112	5,686	5.4	(4.2-6.8)
6	74	3,874	3.7	(2.7-4.9)
7	42	2,222	2.1	(1.4-3.2)
8+	61	2,838	3.8	(2.7-5.4)

Table 87. Prevalence of unmet basic needs during pregnancy, MI PRAMS, 2018

Unmet basic need	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Types (non-exclusive)				
Could not keep basic utility services on (heat, water, light)	158	7,206	6.9	(5.6-8.6)
Did not have affordable, reliable transportation	159	6,884	6.6	(5.3-8.2)
House or apartment was too crowded	141	6,975	6.7	(5.4-8.4)
Did not have safe housing	147	6,812	6.6	(5.3-8.2)
Skipped meals or ate less because there wasn't enough money for food	150	7,124	6.8	(5.5-8.5)
Did not have consistent housing	118	5,551	5.4	(4.2-6.9)
Could not access a telephone when needed	61	2,844	2.7	(1.9-3.9)
Other unmet needs	142	6,359	6.2	(4.9-7.7)

Table 88. Cumulative number of unmet basic needs during pregnancy, MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
None	1,256	78,243	74.8	(72.2-77.2)
1	320	15,650	15.0	(13.0-17.1)
2	98	4,430	4.2	(3.2-5.6)
3	68	2,864	2.7	(1.9-3.8)
4+	75	3,399	3.2	(2.4-4.5)

Table 89. Prevalence of any physical violence 12 months before or during pregnancy, MI PRAMS, 2018

Time period of abuse	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Abuse either 12 months before conception or during pregnancy	114	5,843	5.5	(4.3-7.0)
Abuse 12 months before conception	82	3,930	3.7	(2.7-5.0)
Abuse during pregnancy	74	3,576	3.4	(2.5-4.6)

Table 90. Perpetrator of abuse 12 months before conception, MI PRAMS, 2018

Person who abused mother	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Husband/partner	41	2,038	1.9	(1.3-2.9)
Ex-husband/partner	37	2,054	2.0	(1.3-3.0)
Another family member	16	982	0.9**	(0.5-1.8)
Someone else	21	1,333	1.3	(0.8-2.1)

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

Table 91. Perpetrator of abuse during pregnancy, MI PRAMS, 2018

Person who abused mother	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Husband/partner	37	1,590	1.5	(1.0-2.3)
Ex-husband/partner	18	1,008	1.0	(0.5-1.7)
Another family member	15	494	0.5**	(0.2-1.0)
Someone else	22	1,373	1.3	(0.8-2.2)

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

Table 92. Prevalence of maternal adverse childhood experiences, MI PRAMS, 2018

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	648	37,689	36.5	(33.7-39.5)
A parent or guardian I lived with had a serious drinking or drug problem	294	18,665	18.0	(15.8-20.5)
We had to move because of trouble paying the rent or mortgage	295	17,111	16.5	(14.4-19.0)
A parent or guardian got in trouble with the law or went to jail	230	12,984	12.5	(10.6-14.7)
Someone in my family or I went hungry because we could not afford enough food	160	8,618	8.3	(6.8-10.2)
Most of the time, I did not have an adult who believed in me and who I could count on to help me	182	9,888	9.6	(7.9-11.6)
I was in foster care (removed from home by court or child welfare)	118	5,551	5.4	(4.2-6.9)

Table 93. Cumulative number of maternal adverse childhood experiences, MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
None	823	50,388	48.4	(45.5-51.4)
1	501	25,469	24.5	(22.1-27.1)
2	223	13,734	13.2	(11.3-15.4)
3	118	6,307	6.1	(4.8-7.6)
4+	132	8,133	7.8	(6.3-9.7)

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, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Very often	88	6,096	5.9	(4.5-7.6)
Somewhat often	200	11,105	10.7	(9.0-12.7)
Not very often	441	23,830	23.0	(20.6-25.6)
Never	1,057	62,719	60.5	(57.5-63.3)

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, 2018

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	1,643	96,085	92.1	(90.3-93.5)
It is not hard for me to snap back when something bad happens	1,604	92,695	89.2	(87.2-90.9)
I do not have a hard time making it through stressful events	1,538	89,404	85.5	(83.2-87.4)
I tend to bounce back quickly after hard times	1,269	71,723	68.8	(66.0-71.5)
It does not take me long to recover from a stressful event	952	55,884	54.0	(51.0-56.9)
I usually come through a difficult time with little trouble	929	54,538	52.4	(49.5-55.3)

Table 96. Cumulative number of positive responses to stressful life events, MI PRAMS, 2018

Number of positive responses to stressful situations	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-3	378	21,701	20.7	(18.4-23.2)
4	534	31,678	30.2	(27.6-33.0)
5	392	20,099	19.2	(17.0-21.5)
6	511	31,381	29.9	(27.3-32.7)

Table 97. Post-partum checkup for mother,
MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Yes	1,583	93,023	89.1	(87.2-90.8)
No	238	11,335	10.9	(9.2-12.8)

Table 98. Prevalence of health care provider discussions and actions taken during postpartum checkup,
MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Discussion or Action (non-exclusive)				
Discuss birth control methods	1,403	83,012	89.8	(87.7-91.5)
Ask if feeling down or depressed	1,388	81,856	88.6	(86.5-90.4)
Ask if taking other prescriptions medications	1,113	66,361	72.0	(69.1-74.7)
Ask about current emotional or physical abuse	1,055	58,374	63.5	(60.4-66.5)
Ask if smoking cigarettes	1,026	57,454	62.4	(59.3-65.4)
Discuss healthy eating, exercise and losing pregnancy weight gain	931	51,585	55.6	(52.5-58.7)
Ask if drinking alcohol	879	47,938	52.2	(49.0-55.3)
Discuss how long to wait to get pregnant again	851	46,582	50.5	(47.4-53.6)
Advise to take folic acid	722	43,296	47.5	(44.3-50.7)
Give or prescribe hormonal or barrier contraceptives	730	38,971	42.4	(39.3-45.5)
Ask if taking prescription opioids	639	34,335	37.5	(34.5-40.6)
Test for diabetes	463	21,490	23.6	(21.1-26.3)
Insert an IUD	303	16,850	18.5	(16.1-21.1)

Table 99. Post-partum depression symptoms, MI PRAMS, 2018

Experience	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Since new baby was born, number of mothers reporting…				
Feeling down, depressed, or hopeless				
Never	681	36,463	35.2	(32.4-38.0)
Rarely	521	34,854	33.6	(30.9-36.5)
Sometimes	413	22,872	22.1	(19.7-24.6)
Often	137	7,516	7.2	(5.8-9.0)
Always	41	1,974	1.9	(1.2-2.9)
Having little or no pleasure in doing things				
Never	701	40,431	38.8	(36.0-41.7)
Rarely	471	30,502	29.3	(26.6-32.0)
Sometimes	374	20,394	19.6	(17.3-22.0)
Often	170	8,789	8.4	(6.9-10.2)
Always	95	4,104	3.9	(3.0-5.2)
Mothers reporting significant post-partum depression**	348	16,965	16.4	(14.4-18.7)

**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.

Table 100. Maternal immunization before and during pregnancy, MI PRAMS, 2018

Maternal Immunization	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Flu Shot				
No	962	50,546	48.6	(45.7-51.6)
Yes, before pregnancy	164	7,951	7.6	(6.3-9.3)
Yes, during pregnancy	696	45,476	43.7	(40.8-46.7)
Tdap				
No	524	25,529	24.2	(21.9-26.7)
Yes	1,167	72,933	69.2	(66.5-71.7)
I don't know	157	6,972	6.6	(5.3-8.2)

Table 101. Plans for future infant immunization, MI PRAMS, 2018

Immunization Plans	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
As doctor recommends	1,421	84,946	84.4	(82.2-86.4)
All vaccines but on a different schedule	78	4,887	4.9	(3.7-6.4)
Only some vaccines	162	7,067	7.0	(5.7-8.6)
No vaccines planned	63	3,752	3.7	(2.7-5.1)

Table 102. Average amount of maternal sleep each night in the last week, MI PRAMS, 2018

Quantity (hours)	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-3	156	6,491	6.5	(5.2-8.0)
4-6	1,030	59,200	58.9	(55.9-61.9)
7-8	486	32,520	32.4	(29.6-35.3)
9+	47	2,268	2.3	(1.5-3.3)

Table 103. Average number of times mother awoke each night in the last week, MI PRAMS, 2018

Number of awakenings	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-1	356	22,016	22.9	(20.4-25.6)
2	543	32,830	34.1	(31.2-37.1)
3	416	24,548	25.5	(22.9-28.3)
4+	310	16,870	17.5	(15.3-20.0)

Table 104. Partner living arrangement with mother, MI PRAMS, 2018

Living arrangement	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Types (exclusive)				
Partner lives with me all of the time	1,267	85,947	83.0	(81.0-84.8)
Partner lives with me some of the time	93	3,745	3.6	(2.7-4.8)
Partner does not live with me	222	6,539	6.3	(5.3-7.5)
I do not have a husband or partner	208	7,297	7.0	(5.8-8.5)

Table 105. Ways that husband or partner supports mother, MI PRAMS, 2018

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)	1,508	93,378	97.8	(96.8-98.4)
My partner is someone I can talk with about things that are important to me	1,454	91,091	95.5	(94.2-96.5)
My partner is someone who does things with me	1,450	90,518	95.0	(93.6-96.1)
My partner is someone whom I can count on	1,463	91,700	96.1	(94.8-97.0)
My partner is someone who talks with me and spends time with me	1,453	91,036	95.4	(94.0-96.4)
My partner is someone I can count on for financial support if I need it	1,443	89,096	93.5	(91.8-94.9)
My partner is someone who is affectionate toward me	1,447	90,002	95.3	(93.9-96.3)
My partner is someone who understands how I am feeling	1,352	84,673	88.8	(86.7-90.6)

Table 106. Cumulative number of ways that husband or partner supports mother, MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
0-2	64	2,357	2.5	(1.8-3.4)
3-5	83	3,461	3.6	(2.7-4.9)
6-7	176	11,036	11.5	(9.6-13.7)
8	1,251	78,952	82.4	(79.9-84.6)

Table 107. People available to help watch baby, MI PRAMS, 2018

Infant caretakers	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
Caretakers (non-exclusive)				
Husband/Partner	1,236	73,759	71.1	(68.4-73.7)
Baby's grandparent	1,155	68,108	65.6	(62.7-68.3)
Other close family member/relative	564	29,856	28.7	(26.2-31.4)
Babysitter, nanny, or other child care provider	222	14,974	14.4	(12.4-16.7)
Friend or neighbor	172	10,417	10.0	(8.3-12.0)
Staff at day care center	140	9,322	9.0	(7.4-10.8)
Other	55	3,308	3.2	(2.3-4.4)
Baby always with mom	338	18,317	17.6	(15.5-20.0)

Table 108. Cumulative number of infant caretakers, MI PRAMS, 2018

	Sample Frequency	Weighted Frequency	Weighted Percent	95% Confidence Interval
None	130	8,469	8.2	(6.6-10.0)
1	477	24,336	23.4	(21.0-26.0)
2	658	39,646	38.2	(35.3-41.1)
3	375	22,145	21.3	(19.0-23.8)
4+	146	9,291	8.9	(7.4-10.8)

Comparison of MI PRAMS 2018 Data Tables to MI PRAMS 2015 Data Tables

MI PRAMS 2018 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 **New *topic on Phase 8 survey*	
Table 9**. Type of healthcare visits among women in the 12 months before pregnancy **New *topic on Phase 8 survey*	
Table 10**. Type of counseling/screening among women reporting any healthcare visits in the 12 months before pregnancy **New *topic on Phase 8 survey*	
Table 11.^ Frequency of taking a folate-containing vitamin in the month before pregnancy ^ *Topic available but not reported in Phase 7 tables*	
Table 12.^ Prevalence of no folic acid containing vitamin consumption in the month before pregnancy by maternal characteristics ^ *Topic available but not reported in Phase 7 tables*	
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 2018 Table	MI PRAMS 2015 Table
Table 16.^^ Distribution of contraceptive behaviors at the time of conception ^^ *Topic available in Phase 6 Survey*	
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 ^^*Topic available in Phase 6 Survey*	
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 ^ *Topic available but not reported in Phase 7 tables*	
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 ^ *Topic available but not reported in Phase 7 tables*	
Table 31.^^ Barriers to starting prenatal care as early as wanted among women who began prenatal care during the first trimester ^^*Topic available in Phase 6 survey*	
Table 32.^^ Barriers to starting prenatal care as early as wanted among women who began prenatal care after the first trimester ^^*Topic available in Phase 6 survey*	
Table 33**. Prevalence of topics discussed by health care provider during prenatal care visits ***New topic on Phase 8 survey*	

MI PRAMS 2018 Table	MI PRAMS 2015 Table
Table 34**. Prevalence of Pregnancy Complications **New *topic on Phase 8 survey*	
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 ^ *Topic available but not reported in Phase 7 tables*	
Table 38**. Prevalence of electronic cigarette usage during the 3 months before pregnancy by maternal characteristics **New *topic on Phase 8 survey*	
Table 39**. Prevalence of electronic cigarette usage during the last 3 months of pregnancy **New *topic on Phase 8 survey*	
Table 40**. Prevalence of hookah usage in 2 years before survey completion by maternal characteristics **New *topic on Phase 8 survey*	
Table 41**. Prevalence of marijuana or hash usage in 12 months before pregnancy by maternal characteristics **New *topic on Phase 8 survey*	
Table 42**. Prevalence of marijuana or hash usage during pregnancy by maternal characteristics **New *topic on Phase 8 survey*	
Table 43**. Prevalence of marijuana or hash usage after pregnancy by maternal characteristics **New *topic on Phase 8 survey*	
Table 44**. Prevalence of opioid pain reliever usage in 12 months before pregnancy by maternal characteristics **New *topic on Phase 8 survey*	
Table 45**. Prevalence of opioid pain reliever usage during pregnancy by maternal characteristics **New *topic on Phase 8 survey*	
Table 46**. Prevalence of opioid pain reliever usage after pregnancy by maternal characteristics **New *topic on Phase 8 survey*	
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 2018 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 ^*Topic available, but not reported in Phase 7 tables*	Table 36. Prevalence of high birthweight by maternal characteristics
Table 52^. Prevalence of high birthweight by diabetes before pregnancy or gestational diabetes ^*Topic available, but not reported in Phase 7 tables*	
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 ^*Topic available, but not reported in Phase 7 tables*	
Table 56**. Reasons for not initiating breastfeeding **New *topic on Phase 8 survey*	
Table 57**. Cumulative number of reasons for not initiating breastfeeding **New *topic on Phase 8 survey*	
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 ^*Topic available, but not reported in Phase 7 tables*	
Table 60.^ Prevalence of 2-month breastfeeding duration by maternal characteristics ^*Topic available, but not reported in Phase 7 tables*	
Table 61^. Prevalence of 3-month breastfeeding duration by maternal characteristics ^*Topic available, but not reported in Phase 7 tables*	
Table 62*. Reasons for stopping breastfeeding *Direct comparison not possible between survey phases*	Table 43. Reasons for stopping breastfeeding
Table 63**. Breastfeeding information sources before or after delivery **New *topic on Phase 8 survey*	
Table 64**. Total number of breastfeeding information sources **New *topic on Phase 8 survey*	

MI PRAMS 2018 Table	MI PRAMS 2015 Table
Table 65**. Did mother ever use a breast pump **New *topic on Phase 8 survey*	
Table 66**. Source of breast pump **New *topic on Phase 8 survey*	
Table 67**. Prevalence of ever using a breast pump by maternal characteristics **New *topic on Phase 8 survey*	
Table 68**. Baby health indicators **New *topic on phase 8 survey*	
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 **New *topic on Phase 8 survey*	
Table 71**. Infant slept in his/her own crib or bed in mother's room **New *topic on Phase 8 survey*	
Table 72*^. Infant sleep space characteristics *Direct comparison not possible between survey phases* ^Topic available, but not reported in Phase 7 tables*	
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 *Direct comparison not possible between survey phases*	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 **New *topic on Phase 8 survey*	
Table 76.* Prevalence of infant usually sleeping in a crib by maternal characteristics *Direct comparison not possible between survey phases*	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 *Direct comparison not possible between survey phases*	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 **New topic on Phase 8 survey*	
Table 79**. Prevalence of infant usually sleeping in an infant car seat or swing by maternal characteristics **New *topic on Phase 8 survey*	
Table 80**. Prevalence of infant usually sleeping in a sleep sack or wearable blanket by maternal characteristics	

MI PRAMS 2018 Table	MI PRAMS 2015 Table
**New topic on Phase 8 survey*	
Table 81.* Prevalence of infant usually sleeping with a blanket by maternal characteristics *Direct comparison not possible between survey phases*	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 *Direct comparison not possible between survey phases* *^Topic available, but not reported in Phase 7 tables*	
Table 83.* Prevalence of infant usually sleeping with crib bumper pads (mesh or non-mesh) by maternal characteristics *Direct comparison not possible between survey phases*	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 **New topic on phase 8 survey*	
Table 88**. Cumulative number of unmet basic needs during pregnancy **New topic on phase 8 survey*	
Table 89*. Prevalence of any physical violence 12 months before or during pregnancy *Direct comparison not possible between survey phases*	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 **New topic on phase 8 survey*	
Table 93**. Cumulative number of maternal adverse childhood experiences **New topic on phase 8 survey*	
Table 94**. From childhood through age 13 how often did mother's family have difficulty paying for basic needs like food and housing **New topic on phase 8 survey*	
Table 95**. Positive responses to stressful events	

MI PRAMS 2018 Table	MI PRAMS 2015 Table
**New topic on phase 8 survey*	
Table 96**. Cumulative number of positive responses to stressful life events **New topic on phase 8 survey*	
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 **New topic on phase 8 survey*	
Table 99. Post-partum depression symptoms	Table 61. Post-partum depression symptoms
Table 100^. Maternal immunization before and during pregnancy ^Topic available, but not reported in Phase 7 tables (flu only)*	
Table 101**. Plans for future infant immunization **New topic on survey Phase 8*	
Table 102**. Average amount of maternal sleep each night in the last week **New topic on survey Phase 8*	
Table 103**. Average number of times mother awoke each night in the last week **New topic on survey Phase 8*	
Table 104**. Partner living arrangement with mother **New topic on survey Phase 8*	
Table 105**. Ways that husband or partner supports mother **New topic on survey Phase 8*	
Table 106**. Cumulative number of ways that husband or partner supports mother **New topic on survey Phase 8*	
Table 107**. People available to help watch baby **New topic on survey Phase 8*	
Table 108**. Cumulative number of infant caretakers **New topic on survey Phase 8*	

Phase 8 of the PRAMS survey includes birth years 2016, 2017, and 2018. Table numbers and names for the 2016, 2017, and 2018 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 www.michigan.gov/prams.

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