



Prevalence of Selected Maternal and Child Health Indicators for Michigan, Pregnancy Risk Assessment Monitoring System (PRAMS), 2016–2020

Health Indicator	2016		2017		2018		2019		2020		Overall 2020 ^{II}
	N [#]	% (95% CI) ^{II}	N [#]	% (95% CI) ^{II}	N [#]	% (95% CI) ^{II}	N [#]	% (95% CI) ^{II}	N [#]	% (95% CI) ^{II}	% (95% CI) ^{II}
Nutrition											
• Multivitamin use ≥4 times a week during the month before pregnancy	1789	42.1 (39.2-45.0)	1883	37.7 (34.9-40.6)	1851	42.3 (39.4-45.2)	1387	41.3 (38.2-44.6)	1390	43.2 (40.1-46.4)	43.6 (42.9-44.4)
Pre-pregnancy Weight											
• Underweight (body mass index [BMI] <18.5 kg/m ²)	1728	3.0 (2.1-4.2)	1840	2.1 (1.5-3.0)	1798	2.7 (1.9-3.8)	1347	2.8 (1.8-4.2)	1351	3.5 (2.5-4.9)	3.2 (2.9-3.5)
• Overweight (BMI 25–29.9 kg/m ²)	1728	24.6 (22.1-27.2)	1840	25.9 (23.3-28.6)	1798	26.3 (23.8-29.0)	1347	26.6 (23.8-29.7)	1351	25.0 (22.3-27.9)	26.1 (25.5-26.8)
• Obese (BMI ≥30 kg/m ²)	1728	25.5 (23.0-28.2)	1840	27.9 (25.3-30.6)	1798	30.4 (27.8-33.1)	1347	29.6 (26.7-32.6)	1351	31.4 (28.5-34.4)	27.7 (27.0-28.4)
Substance Use											
• Any cigarette smoking											
• During the 3 months before pregnancy	1776	22.0 (19.5-24.6)	1869	21.5 (19.1-24.1)	1843	22.0 (19.6-24.6)	1373	20.5 (17.8-23.4)	1374	20.0 (17.5-22.7)	14.0 (13.4-14.5)
• During the last 3 months of pregnancy	1776	10.9 (9.1-13.0)	1867	11.3 (9.5-13.4)	1843	10.4 (8.7-12.4)	1376	10.8 (8.8-13.2)	1376	10.3 (8.4-12.5)	6.5 (6.2-6.9)
• Postpartum	1776	15.7 (13.6-18.1)	1869	15.6 (13.5-17.9)	1843	14.5 (12.5-16.8)	1376	13.4 (11.3-15.9)	1377	13.7 (11.5-16.2)	8.8 (8.3-9.2)
• Any e-cigarette use											
• During the 3 months before pregnancy	1769	2.9 (2.0-4.1)	1864	3.0 (2.0-4.3)	1839	3.4 (2.5-4.6)	1372	3.2 (2.1-4.9)	1377	7.1 (5.6-9.1)	5.2 (4.9-5.6)
• During the last 3 months of pregnancy	1771	1.1 (0.6-2.1)	1865	0.8 (0.4-1.6)	1838	1.0 (0.6-1.6)	1373	0.9 (0.4-2.0)	1376	2.9 (1.9-4.3)	1.5 (1.3-1.7)
• Hookah use in the last 2 years	1769	4.9 (4.0-6.1)	1849	4.8 (3.8-6.0)	1829	5.2 (4.2-6.5)	1354	4.4 (3.5-5.7)	1358	4.8 (3.7-6.1)	4.4 (4.1-4.8)
• Heavy drinking (≥8 drinks a week) during the 3 months before pregnancy	1763	2.6 (1.8-3.9)	1854	3.0 (2.0-4.3)	1831	2.9 (2.0-4.1)	1362	3.2 (2.1-4.7)	1373	2.7 (1.9-3.9)	3.0 (2.8-3.3)
Intimate Partner Violence (IPV)[‡]											
• Experienced IPV during the 12 months before pregnancy by a husband or partner and/or by an ex-husband or ex-partner	1770	2.8 (2.0-3.9)	1858	2.6 (1.8-3.8)	1844	3.4 (2.5-4.7)	1372	3.1 (2.1-4.6)	1372	2.9 (2.0-4.1)	2.5 (2.3-2.8)
• Experienced IPV during pregnancy by a husband or partner and/or by an ex-husband or ex-partner	1771	2.3 (1.6-3.4)	1856	2.0 (1.3-3.1)	1843	2.1 (1.4-3.0)	1372	1.7 (1.1-2.7)	1373	1.5 (1.0-2.3)	1.7 (1.5-1.9)
Depression											
• Self-reported depression in the 3 months before pregnancy	1782	16.0 (13.8-18.4)	1872	15.7 (13.6-18.0)	1850	15.6 (13.5-17.9)	1374	18.8 (16.2-21.6)	1383	20.0 (17.6-22.8)	15.5 (15.0-16.1)
• Self-reported depression during pregnancy	1771	13.3 (11.4-15.5)	1869	14.2 (12.2-16.5)	1840	15.6 (13.6-17.9)	1366	17.0 (14.6-19.8)	1381	18.9 (16.5-21.5)	15.2 (14.7-15.8)
• Self-reported postpartum depressive symptoms ^{**}	1725	14.3 (12.4-16.5)	1820	12.9 (11.1-15.0)	1790	16.4 (14.4-18.7)	1341	14.8 (12.6-17.4)	1348	16.1 (14.0-18.6)	13.4 (12.9-13.9)
Health Care Services											
• Health care visit in the 12 months before pregnancy	1778	67.9 (65.1-70.6)	1864	70.9 (68.2-73.5)	1842	68.7 (65.9-71.3)	1379	70.5 (67.5-73.4)	1384	64.9 (61.8-67.9)	66.0 (65.3-66.8)
• Began prenatal care in 1st trimester	1729	86.8 (84.7-88.7)	1844	86.4 (84.3-88.3)	1809	86.6 (84.6-88.5)	1347	87.1 (84.8-89.1)	1359	85.8 (83.5-87.9)	87.1 (86.5-87.6)
• Had a flu shot in the 12 months before delivery	1758	56.0 (53.0-58.9)	1852	52.9 (50.0-55.9)	1822	51.4 (48.4-54.3)	1363	54.6 (51.3-57.8)	1372	57.9 (54.8-61.0)	60.9 (60.1-61.7)
• Had maternal postpartum checkup	1744	90.6 (88.7-92.2)	1849	91.3 (89.5-92.8)	1821	89.1 (87.2-90.8)	1359	88.7 (86.5-90.5)	1370	86.4 (84.1-88.4)	88.1 (87.6-88.6)
Pregnancy Intention											
• Mistimed	1750	19.5 (17.2-21.9)	1862	18.9 (16.7-21.3)	1835	19.4 (17.2-21.8)	1374	17.6 (15.3-20.3)	1382	16.5 (14.4-18.9)	17.7 (17.2-18.4)
• Unwanted pregnancy	1750	6.1 (4.9-7.6)	1862	5.3 (4.2-6.7)	1835	6.3 (5.0-7.8)	1374	6.7 (5.3-8.6)	1382	7.3 (5.8-9.0)	6.3 (6.0-6.7)
• Unsure whether wanted pregnancy	1750	15.6 (13.6-17.8)	1862	19.9 (17.7-22.4)	1835	17.1 (15.0-19.4)	1374	15.9 (13.7-18.4)	1382	16.5 (14.3-18.9)	15.5 (15.0-16.1)
• Intended pregnancy	1750	58.9 (56.0-61.7)	1862	55.8 (52.9-58.7)	1835	57.2 (54.4-60.1)	1374	59.8 (56.6-62.9)	1382	59.8 (56.7-62.8)	60.4 (59.6-61.1)

Health Indicator	2016		2017		2018		2019		2020		Overall 2020 [¶]	
	N [#]	% (95% CI) [¶]	N [#]	% (95% CI) [¶]	N [#]	% (95% CI) [¶]	N [#]	% (95% CI) [¶]	N [#]	% (95% CI) [¶]	% (95% CI) [¶]	
Postpartum^{††} Family Planning												
• Use of any postpartum contraception ^{†††}	1717	77.6 (75.0-80.0)	1820	78.3 (75.8-80.6)	1797	76.9 (74.4-79.3)	1342	73.9 (71.0-76.7)	1347	74.1 (71.2-76.8)	74.5 (73.9-75.2)	
• Highly effective contraceptive methods												
• Male or female sterilization	1717	12.8 (10.8-14.9)	1820	11.6 (9.8-13.7)	1797	13.4 (11.4-15.6)	1342	12.8 (10.8-15.2)	1347	11.1 (9.1-13.3)	10.9 (10.4-11.4)	
• Long-acting reversible contraceptive method ^{§§}	1717	13.3 (11.4-15.6)	1820	15.1 (13.0-17.4)	1797	14.2 (12.2-16.4)	1342	12.1 (10.0-14.5)	1347	14.5 (12.3-17.0)	16.7 (16.1-17.3)	
• Moderately effective contraceptive methods ^{§§}	1717	29.3 (26.7-32.1)	1820	28.8 (26.1-31.6)	1797	24.6 (22.2-27.2)	1342	26.3 (23.4-29.3)	1347	23.2 (20.6-25.9)	24.5 (23.9-25.2)	
• Least effective contraceptive methods ^{§§}	1717	22.2 (19.8-24.7)	1820	22.8 (20.4-25.5)	1797	24.7 (22.3-27.4)	1342	22.7 (20.1-25.6)	1347	25.4 (22.7-28.4)	22.4 (21.8-23.1)	
Oral Health												
• Teeth cleaned during pregnancy by a dentist or dental hygienist	1783	48.7 (45.7-51.6)	1877	49.8 (46.9-52.8)	1847	49.2 (46.3-52.1)	1376	51.3 (48.0-54.5)	1385	40.8 (37.7-44.0)	40.0 (39.3-40.8)	
Health Insurance Status One Month Before Pregnancy^{¶¶}												
• Private insurance	1731	65.2 (62.4-68.0)	1818	61.4 (58.4-64.2)	1797	60.8 (57.9-63.6)	1340	63.1 (59.8-66.2)	1357	59.9 (56.8-62.9)	61.8 (61.0-62.5)	
• Medicaid	1731	27.1 (24.6-29.7)	1818	29.6 (27.0-32.4)	1797	30.4 (27.8-33.1)	1340	28.8 (25.9-31.9)	1357	31.8 (28.9-34.8)	23.5 (22.9-24.1)	
• No insurance	1731	6.4 (5.0-8.2)	1818	7.4 (5.8-9.4)	1797	7.1 (5.6-9.0)	1340	6.9 (5.3-8.9)	1357	6.8 (5.3-8.8)	14.0 (13.4-14.5)	
Health Insurance Status for Prenatal Care^{¶¶}												
• Private insurance	1659	62.9 (60.0-65.8)	1746	60.1 (57.1-63.0)	1726	59.7 (56.7-62.6)	1307	61.1 (57.8-64.3)	1320	58.5 (55.3-61.6)	59.6 (58.8-60.3)	
• Medicaid	1659	35.6 (32.8-38.6)	1746	38.4 (35.5-41.4)	1726	39.5 (36.6-42.5)	1307	37.1 (34.0-40.4)	1320	40.0 (36.9-43.1)	36.6 (35.8-37.3)	
• No insurance	1659	0.5 (0.2-1.2)	1746	0.7 (0.3-1.5)	1726	0.5 (0.2-1.2)	1307	1.2 (0.6-2.3)	1320	1.1 (0.5-2.2)	2.8 (2.5-3.1)	
Health Insurance Status Postpartum^{††¶¶}												
• Private insurance	1701	58.4 (55.4-61.3)	1811	57.3 (54.4-60.3)	1789	57.1 (54.2-60.0)	1343	59.6 (56.4-62.8)	1357	55.3 (52.1-58.4)	56.4 (55.6-57.2)	
• Medicaid	1701	35.7 (32.9-38.6)	1811	36.6 (33.8-39.5)	1789	38.5 (35.6-41.4)	1343	34.3 (31.3-37.5)	1357	40.9 (37.8-44.0)	35.4 (34.7-36.1)	
• No insurance	1701	4.4 (3.3-6.0)	1811	4.5 (3.3-6.2)	1789	3.5 (2.5-4.9)	1343	5.1 (3.8-6.9)	1357	2.7 (1.8-4.2)	7.2 (6.8-7.7)	
Infant Sleep Practices												
• Baby most often laid on back to sleep	1723	81.9 (79.6-84.0)	1808	83.3 (81.1-85.4)	1788	82.5 (80.2-84.6)	1325	84.9 (82.5-87.0)	1343	85.4 (83.1-87.4)	79.5 (78.9-80.2)	
Breastfeeding Practices												
• Ever breastfed	1731	84.0 (81.7-86.1)	1822	87.7 (85.7-89.5)	1798	86.9 (84.9-88.7)	1338	87.3 (85.1-89.3)	1349	85.9 (83.6-88.0)	87.9 (87.3-88.4)	
• Any breastfeeding at 8 weeks	1715	62.7 (59.8-65.6)	1804	65.1 (62.2-67.9)	1781	65.1 (62.3-67.8)	1324	66.7 (63.5-69.7)	1340	65.4 (62.3-68.3)	68.5 (67.8-69.3)	

¶ PRAMS sites aggregated for 2020: Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York City, North Dakota, Oregon, Pennsylvania, Puerto Rico, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming that met the required 50% response rate threshold for inclusion.

Unweighted sample size.

¶ Weighted percentage (95% confidence interval [CI]).

‡ Defined as being pushed, hit, slapped, kicked, choked, or physically hurt in any way by a husband or partner and/or by an ex-husband or ex-partner. In 2016 (Phase 8 questionnaire), the question response options were expanded to include “my ex-husband or ex-partner” in addition to “my husband or partner.”

** Defined as “always” or “often” feeling down, depressed, or hopeless or having little interest or little pleasure in doing things she usually enjoyed since delivery.

†† Postpartum defined as the time the PRAMS survey was completed.

‡‡ Defined as using any kind of birth control postpartum (female or male sterilization, intrauterine device (IUD), contraceptive implant, birth control pills, shots or injections, contraceptive patch, vaginal ring, condoms, rhythm method or natural family planning, withdrawal).

§§ Long-acting reversible contraception (LARC) methods include IUD or contraceptive implant. Moderately effective methods include birth control pills, shots or injections (e.g., Depo-Provera), contraceptive patch, and vaginal ring. Least effective methods include condom, rhythm method or natural family planning, and withdrawal. Women who selected the “other” write-in option were excluded from the analysis.

¶¶ Insurance coded as Medicaid (Medicaid or state-named Medicaid program), Private (private only, any other insurance in combination with private, or TRICARE or other military insurance), or No insurance (no insurance or Indian Health Service (IHS) only; in Alaska, coverage by the Alaska Tribal Health System was part of the IHS response option). Other state-specific government plans or programs, such as the Children’s Health Insurance Program (CHIP) or State Children’s Health Insurance Program (SCHIP), were excluded from estimates.