

Prevalence of Selected Maternal and Child Health Indicators for Massachusetts, Pregnancy Risk Assessment Monitoring System (PRAMS), 2016–2019

Health Indicator	2016		2017		2018		2019		Overall 2019§
	N [#]	% (95% CI)¶	N#	% (95% CI)¶	N#	% (95% CI)¶	N#	% (95% CI) [¶]	% (95% CI) [¶]
Nutrition									
 Multivitamin use ≥4 times a week during the month before pregnancy 	1308	51.1 (47.7-54.5)	1413	50.7 (47.3-54.0)	1433	50.9 (47.6-54.1)	1690	54.1 (51.0-57.1)	41.8 (41.0-42.5)
Pre-pregnancy Weight									
 Underweight (Body Mass Index [BMI]<18.5 kg/m²) 	1262	2.1 (1.4-3.2)	1373	3.2 (2.2-4.5)	1374	1.9 (1.2-3.0)	1619	3.1 (2.1-4.5)	3.3 (3.0-3.6)
• Overweight (BMI 25-29.9 kg/m²)	1262	27.4 (24.3-30.6)	1373	27.3 (24.4-30.4)	1374	26.8 (24.0-29.9)	1619	27.2 (24.5-30.2)	26.2 (25.5-26.9)
 Obese (BMI≥30 kg/m²) 	1262	18.2 (15.7-21.0)	1373	18.9 (16.4-21.6)	1374	21.2 (18.5-24.1)	1619	22.8 (20.2-25.5)	27.1 (26.4-27.8)
Substance Use									
Any cigarette smoking									
 During the 3 months before pregnancy 	1301	13.5 (11.1-16.4)	1402	13.0 (10.7-15.6)	1417	9.4 (7.4-11.8)	1672	11.6 (9.6-14.0)	15.1 (14.6-15.7)
 During the last 3 months of pregnancy 	1301	5.3 (3.8-7.6)	1402	4.7 (3.3-6.5)	1416	4.3 (2.9-6.3)	1674	4.5 (3.3-6.0)	6.8 (6.5-7.2)
Postpartum	1300	8.2 (6.2-10.6)	1402	8.3 (6.5-10.7)	1416	6.5 (4.8-8.8)	1675	6.5 (5.0-8.3)	9.7 (9.2-10.1)
Any e-cigarette use									
During the 3 months before pregnancy	1298	3.1 (2.0-4.8)	1397	1.9 (1.1-3.3)	1415	2.2 (1.3-3.7)	1669	2.6 (1.7-3.9)	4.3 (4.0-4.6)
During the last 3 months of pregnancy	1299	0.8 (0.3-2.2)	1399	0.4 (0.1-1.1)	1417	0.5 (0.2-1.6)	1672	0.9 (0.4-1.8)	1.3 (1.1-1.4)
Hookah use in the last 2 years	1274	5.8 (4.4-7.7)	1384	5.0 (3.8-6.7)	1401	4.4 (3.3-5.8)	1657	6.4 (5.1-8.0)	4.7 (4.4-5.1)
 Heavy drinking (≥8 drinks a week) during the 3 months before 	4204	20/2046	4207	20(4044)	4.445	2.4/4.6.2.0\	4672	20/2044)	20(2022)
pregnancy	1294	3.0 (2.0-4.6)	1397	2.9 (1.9-4.4)	1415	2.4 (1.6-3.8)	1672	3.0 (2.0-4.4)	2.9 (2.6-3.2)
Intimate Partner Violence (IPV) [¥]									
• Experienced IPV during the 12 months before pregnancy by a husband	1290	1.6 (1.0-2.7)	1402	2.8 (1.9-4.2)	1419	2.5 (1.6-3.9)	1674	1.7 (1.2-2.5)	3.0 (2.8-3.3)
or partner and/or an ex-husband or partner	1290	1.0 (1.0-2.7)	1402	2.0 (1.9-4.2)	1419	2.5 (1.0-5.9)	10/4	1.7 (1.2-2.5)	3.0 (2.6-3.3)
 Experienced IPV during pregnancy by a husband or partner and/or an 	1287	1.0 (0.6-1.6)	1399	1.5 (0.9-2.5)	1416	1.9 (1.2-3.1)	1670	0.9 (0.6-1.5)	2.0 (1.8-2.2)
ex-husband or partner	1207	1.0 (0.0-1.0)	1333	1.5 (0.9-2.5)	1410	1.9 (1.2-3.1)	1070	0.9 (0.0-1.3)	2.0 (1.0-2.2)
Depression									
 Self-reported depression in the 3 months before pregnancy 	1290	12.9 (10.7-15.5)	1404	12.1 (10.0-14.5)	1414	13.8 (11.6-16.4)	1667	13.5 (11.4-15.9)	15.1 (14.5-15.7)
 Self-reported depression during pregnancy 	1281	10.7 (8.7-13.0)	1391	12.3 (10.2-14.8)	1409	12.3 (10.2-14.8)	1670	13.1 (11.1-15.5)	14.8 (14.2-15.4)
 Self-reported postpartum depressive symptoms** 	1291	11.0 (9.1-13.3)	1391	10.8 (8.9-12.9)	1412	10.3 (8.5-12.3)	1668	10.2 (8.7-12.1)	13.4 (12.9-14.0)
Health Care Services									
 Health care visit in the 12 months before pregnancy 	1296	76.8 (73.9-79.5)	1414	77.0 (74.3-79.5)	1432	80.2 (77.7-82.4)	1676	75.9 (73.3-78.3)	68.0 (67.2-68.7)
Began prenatal care in 1st trimester	1279	91.8 (89.7-93.5)	1386	92.4 (90.7-93.8)	1406	90.1 (87.9-91.9)	1661	92.7 (91.2-94.0)	87.7 (87.2-88.3)
 Had a flu shot in the 12 months before birth 	1288	73.3 (70.0-76.3)	1403	72.6 (69.4-75.6)	1406	76.1 (73.1-78.9)	1668	78.5 (75.8-80.9)	60.8 (60.1-61.6)
Had maternal postpartum checkup	1288	92.0 (89.8-93.7)	1395	92.4 (90.7-93.8)	1419	93.3 (91.4-94.8)	1673	92.9 (91.1-94.3)	90.7 (90.3-91.2)
Pregnancy Intention									
Mistimed	1302	14.0 (11.9-16.4)	1412	14.9 (12.7-17.4)	1424	14.3 (12.2-16.6)	1681	16.4 (14.3-18.8)	19.3 (18.7-19.9)
Unwanted pregnancy	1302	4.7 (3.5-6.4)	1412	4.8 (3.5-6.4)	1424	4.6 (3.5-6.2)	1681	4.6 (3.4-6.0)	6.5 (6.2-6.9)
 Unsure whether wanted pregnancy 	1302	14.6 (12.2-17.4)	1412	14.2 (11.9-16.7)	1424	12.8 (10.7-15.3)	1681	12.2 (10.4-14.2)	15.7 (15.1-16.2)
Intended pregnancy	1302	66.6 (63.3-69.8)	1412	66.2 (63.0-69.3)	1424	68.3 (65.1-71.2)	1681	66.9 (64.0-69.6)	58.5 (57.7-59.3)

Health Indicator —		2016		2017		2018		2019	
	N#	% (95% CI) [¶]	% (95% CI) [¶]						
Postpartum ^{††} Family Planning									
 Use of any postpartum contraception^{††‡‡} 	1276	73.9 (70.8-76.9)	1380	73.8 (70.8-76.7)	1414	73.4 (70.4-76.3)	1655	72.1 (69.1-74.8)	76.4 (75.7-77.0)
Highly effective contraceptive methods									
 Male or female sterilization 	1276	7.9 (6.3-10.0)	1380	8.1 (6.5-10.2)	1414	10.6 (8.6-13.1)	1655	8.7 (7.1-10.7)	11.5 (11.0-12.0)
 Long acting reversible contraceptive method^{§§} 	1276	17.8 (15.4-20.5)	1380	17.9 (15.5-20.5)	1414	17.4 (15.1-20.0)	1655	19.7 (17.3-22.3)	17.3 (16.7-17.9)
 Moderately effective contraceptive methods^{§§} 	1276	22.7 (19.9-25.8)	1380	22.7 (19.9-25.7)	1414	23.7 (21.0-26.7)	1655	22.6 (20.1-25.4)	24.6 (23.9-25.3)
 Least effective contraceptive methods^{§§} 	1276	25.5 (22.6-28.6)	1380	25.2 (22.3-28.3)	1414	21.7 (19.1-24.5)	1655	21.0 (18.6-23.7)	23.0 (22.4-23.7)
Oral Health									
 Teeth cleaned during pregnancy by a dentist or dental hygienist 	1306	54.9 (51.5-58.2)	1415	56.2 (52.9-59.5)	1429	57.8 (54.6-61.0)	1686	58.8 (55.7-61.7)	45.9 (45.1-46.7)
Health Insurance Status One Month Before Pregnancy ¶¶									
Private insurance	1267	67.3 (64.2-70.3)	1379	64.8 (61.7-67.7)	1409	67.5 (64.5-70.3)	1654	68.2 (65.6-70.8)	62.7 (62.0-63.5)
Medicaid	1267	29.5 (26.5-32.5)	1379	30.3 (27.6-33.2)	1409	27.4 (24.7-30.2)	1654	27.2 (24.8-29.8)	22.6 (22.0-23.3)
No insurance	1267	2.6 (1.7-3.9)	1379	3.6 (2.6-4.9)	1409	4.4 (3.2-6.0)	1654	3.3 (2.5-4.5)	13.8 (13.2-14.4)
Health Insurance Status for Prenatal Care ^{¶¶}									
Private insurance	1249	65.4 (62.2-68.5)	1370	62.1 (59.0-65.1)	1383	65.9 (62.9-68.8)	1618	66.9 (64.1-69.5)	59.8 (59.1-60.6)
Medicaid	1249	34.0 (30.9-37.2)	1370	36.7 (33.8-39.8)	1383	33.2 (30.3-36.2)	1618	32.3 (29.7-35.0)	36.2 (35.5-37.0)
No insurance	1249	0.3 (0.1-0.9)	1370	0.5 (0.3-1.1)	1383	0.3 (0.1-1.1)	1618	0.2 (0.1-1.0)	2.8 (2.5-3.1)
Health Insurance Status Postpartum****									
Private insurance	1276	62.7 (59.5-65.8)	1384	60.2 (57.1-63.2)	1415	64.9 (61.9-67.8)	1667	64.0 (61.2-66.6)	57.7 (56.9-58.4)
Medicaid	1276	35.7 (32.6-38.9)	1384	37.2 (34.2-40.2)	1415	33.1 (30.2-36.1)	1667	33.5 (30.8-36.2)	29.9 (29.2-30.6)
No insurance	1276	0.5 (0.2-1.5)	1384	1.1 (0.7-1.9)	1415	1.2 (0.8-1.9)	1667	1.5 (1.1-2.2)	11.5 (11.0-12.0)
Infant Sleep Practices									
Baby most often laid on back to sleep	1259	86.2 (84.1-88.2)	1369	83.7 (81.3-85.8)	1396	82.7 (80.3-84.8)	1638	87.5 (85.7-89.1)	79.6 (78.9-80.2)
Breastfeeding Practices									
Ever breastfed	1274	89.5 (86.8-91.6)	1383	89.8 (87.4-91.8)	1415	90.3 (87.8-92.3)	1656	91.6 (89.6-93.2)	87.9 (87.4-88.4)
 Any breastfeeding at 8 weeks 	1272	70.7 (67.3-73.9)	1373	72.2 (69.0-75.2)	1405	70.2 (67.0-73.3)	1645	73.8 (71.0-76.5)	67.7 (67.0-68.4)

[§]PRAMS site aggregate for 2019: Alabama, Alaska, 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, New York State, North Carolina, North Dakota, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, Wisconsin, and Wyoming met the required 50% response rate threshold for inclusion.

[#]Unweighted sample size

[¶]Weighted percent (95% Confidence Interval)

^{*}Defined as being pushed, hit, slapped, kicked, choked, or physically hurt in any way by a husband/partner and/or an ex-husband/ex-partner. In 2016 (Phase 8), 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 is 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/natural family planning; withdrawal).

⁵⁵Long-acting reversible contraception (LARC) methods include Intrauterine Device (IUD) or contraceptive methods include condom, rhythm method/natural family planning, and withdrawal. Women who selected the "other" write-in option were excluded from the analysis.

Insurance is coded as Medicaid (Medicaid or state-named Medicaid program); Private (Private only, any other insurance in combination with private, TRICARE or other military insurance (no insurance or Indian Health Service (IHS) only; in Alaska this also includes Alaska Tribal Health System that are part of the IHS response option); other state-specific government plans or programs such as SCHIP/CHIP are excluded from estimates.